

TFIN22_1

Management Accounting II - Part 1

INSTRUCTOR HANDBOOK
INSTRUCTOR-LED TRAINING

Course Version: 10

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About This Handbook

This handbook is intended to complement the instructor-led presentation of this course, and serve as a source of reference. It is not suitable for self-study.

Typographic Conventions

American English is the standard used in this handbook.

The following typographic conventions are also used.

This information is displayed in the instructor's presentation	
Demonstration	
Procedure	
Warning or Caution	
Hint	
Related or Additional Information	
Facilitated Discussion	
User interface control	<i>Example text</i>
Window title	<i>Example text</i>

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Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Application Consultant

UNIT 1

Basics of New General Ledger Accounting

Lesson 1

Outlining Global Settings for New General Ledger Accounting	2
Exercise 1: Evaluate Global Settings for New General Ledger Accounting	19



UNIT OBJECTIVES

- Describe the global settings for new General Ledger Accounting



2

Outlining Global Settings for New General Ledger Accounting

LESSON OVERVIEW

This lesson shows the basic settings needed in new General Ledger Accounting (new G/L) to assign profit center accounts. The settings apply not only to profit centers, but also to all additional account assignments in Financial Accounting (FI) for which you want to map complete financial statements.



New General Ledger Accounting in SAP ERP Financials enables you to post profit centers as an additional account assignment to the totals table of FI (FAGLFLEXT). Explain both the technical and business aspects of this solution.

Business Example

Your company activated new G/L to capture the benefits of a single and uniform data structure, document splitting, and real-time integration of Controlling (CO) with Financial Accounting (FI). After migration from the classic general ledger to new G/L, you want to use organizational units as, for example, profit centers to report complete financial statements. You are a member of the project team that has been asked to verify whether the necessary settings have been made in the test system. For this reason, you require the following knowledge:

- An understanding of the settings for defining ledgers
- An understanding of the settings for document splitting
- An understanding of the settings for real-time integration of CO with FI



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Describe the global settings for new General Ledger Accounting

Central Database and Scenarios

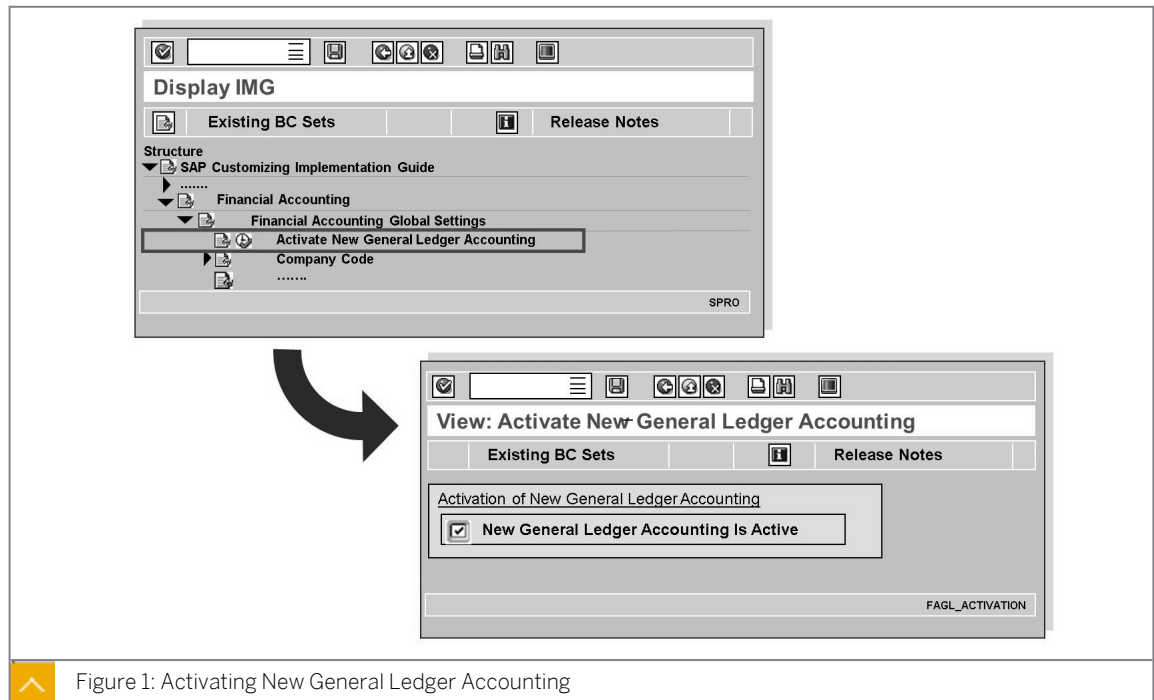


Figure 1: Activating New General Ledger Accounting

New G/L is always active in new installations (SAP ERP). If existing customers decide to use new G/L, it must be activated using the Customizing transaction FAGL_ACTIVATION. In practice, setting the activation switch for existing customers is one of the final activities of a migration project. The activation switch is set for each customer. The activation causes system-wide changes that affect application and Customizing paths.

Advantages of New General Ledger Accounting

New G/L offers the following features compared with classic General Ledger Accounting:

- A central database to store all the information required to fulfill international or industry-specific standards like cost-of-sales accounting, reporting of segments, profit centers, or business areas, and preparation for consolidation
- Complete financial statements of entities such as segments, profit centers, and/or business areas (using document splitting)
- Real-time integration between CO and FI
- Multiple ledgers within the general ledger for financial reporting based on different accounting principles, such as IFRS, US GAAP, local GAAP, and tax law

An overview of the most important new tables in new G/L:

- FAGLFLEXT: Totals
- FAGLFLEXA: Actual line items (general ledger view)
- FAGL_SPLINFO: Splitting information of open items
- FAGLBSIS and FAGLBSAS: Ledger group-specific open items (as of EHP3)
- FAGLFLEXP: Plan line items in general ledger



Hint:

This course only shows aspects of Profit Center Accounting (PCA) with new G/L activated. To learn about the aspects of classic Profit Center Accounting (EC-PCA) with classic General Ledger Accounting activated, see course AC610 Profit Center Accounting.

The following aspects are solely relevant for classic General Ledger Accounting:

- Reconciliation ledger (transaction code KALC)
- Balance sheet adjustment (transaction codes F.5D and F.5E)
- Profit and loss adjustment (transaction code F.50)
- EC-PCA: Transfer Assets (transaction code 1KEI)
- EC-PCA: Transfer Payables/Receivables (transaction code 1KEK)
- EC-PCA: Transfer Material Stocks (transaction code 1KEH)
- EC-PCA: Transfer Work in Process (transaction code 1KEJ)
- Subsequent posting programs (transaction codes 1KE8, 1KE9, and 1KEC)
- Ledger 8A and totals table GLPCT
- Elimination profit center (replaced by real-time integration of CO with FI)

Extended Totals Table FAGLFLEX



Totals table for new General Ledger Accounting			
Table FAGLFLEX (General Ledger: Totals)			
A selection of fields available in the standard system:			
Field	...	Data element	Short Description
...
RYEAR	...	GJAHR	Fiscal Year
RMVCT	...	RMVCT	Transaction Type
RACCT	...	RACCT	Account Number
COST_ELEM	...	KSTAR	Cost Element
BUKRS	...	BUKRS	Company Code
RCNTR	...	KOSTL	Cost Center
PRCTR	...	PRCTR	Profit Center
RFAREA	...	FKBER	Functional Area
RBUSA	...	GSBER	Business Area
SEGMENT	...	FB_SEGMENT	Segment for Segmental Reporting
PPCTR	...	PPCTR	Partner Profit Center
...

SE11

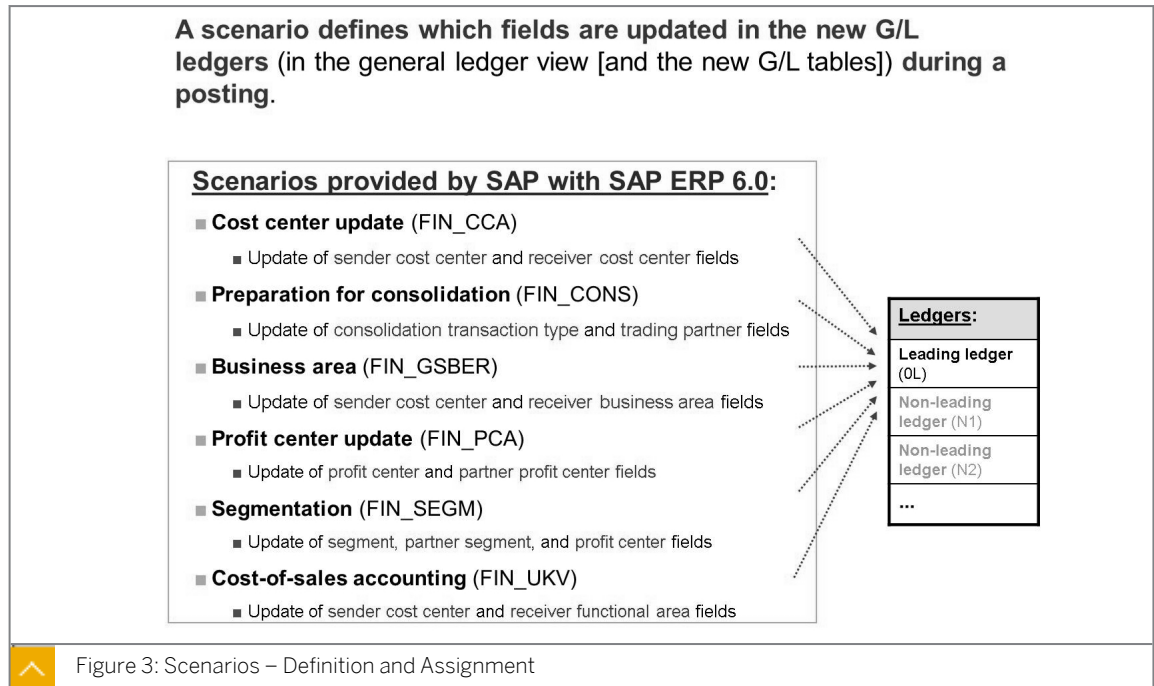
Figure 2: Extended Totals Table FAGLFLEX

The totals table (FAGLFLEXT) for new G/L has more entities than the classic General Ledger Accounting totals table (GLT0).

In standard provided fields are, for example, *Profit Center*, *Segment*, *Functional Area*, and *Transaction Type*.

You can also expand the totals table FAGLFLEXT with additional, customer-specific fields.

Effects of a Scenario Assignment



You can view the available scenarios in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Ledgers* → *Fields* → *Display Scenarios for General Ledger Accounting*. You cannot define customer-specific scenarios.

The delivered scenarios are assigned to the ledgers in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Ledgers* → *Ledger* → *Assign Scenarios and Customer Fields to Ledgers*.

You can assign one, several, or all six scenarios to a ledger. The decision about the number of scenarios to assign depends on the situations or business aspects you want to model in the general ledger.

Entry and General Ledger View



A financial accounting document always has **two views** in new General Ledger Accounting:

The **data entry view** and the **general ledger view**

(In the general ledger view, besides the leading ledger, you may also see the document in other, non-leading ledgers.)

The figure shows two side-by-side screenshots of SAP software. The left screenshot is titled 'Display Document: Data Entry View' and shows fields for Document Number (1900000000), Company Code (1000), Fiscal Year (2011), Document Date (15.01.2011), Posting Date (15.01.2011), Reference, Cross-Comp.No., Currency (EUR), and Ledger Group. Below these fields is a table with columns: Co., Itm, PK, S, Account, Description, Amount, Curr. The table contains three rows: 1 31 1050 Humpert u. Tochter Gm... 44.000,00- EUR; 2 70 11000 000000002310 0000 40.000,00 EUR; 3 40 154000 Input tax 4.000,00 EUR. The total is 0,00 EUR.

The right screenshot is titled 'Display Document: General Ledger View' and shows the same document details. Below the document details is a section for 'Ledger OL' with columns: Doc., FiscalYear, Period. It shows Doc. 1900000000, FiscalYear 2011, Period 1. Below this is another table with columns: Co., Itm, Litem, PK, S, Account, Description, Amount, Curr. The table contains three rows: 1000 1 000001 31 160000 AP-domestic 44.000,00- EUR; 2 000002 70 11000 000000002310 0000 40.000,00 EUR; 3 000003 40 154000 Input tax 4.000,00 EUR. The total is 0,00 EUR.

Figure 4: Entry and General Ledger View

The definition of these two views is as follows:

- Data entry view

The data entry view is the view of how a document appears to the document creator and therefore how it is shown in the subledgers (AP/AR/AA). The short form of data entry view is (just) entry view.

- General ledger view

The general ledger view is the view of how a document appears (only) in the General Ledger.

The posting screens and document display look the same from the end-user perspective. However, the general ledger view provides the additional internal view of the document.

Without Assignment of a Scenario



Displayed transaction: Entry View of an FI document without assignment of scenarios to a ledger

Display Document: Data Entry View

🔍 📄 📁 📊 📑 📌 Taxes 📌 General Ledger View

Document number: 1000000001 Company code: AA00 Fiscal year: YYYY
 Document date: DD.MM.YYYY Posting date: DD.MM.YYYY Period: M

🔍 📄 📁 📊 📑 📌 📌 📌 📌 📌 📌 📌 📌

CCd	P	PK	Acct	Name	Amount	Cur.	B	GB	FKBER	Cctr	PRCTR	TTy	
AA00	1	40	417000	Purch. Services	50.00	EUR	1l	9900	0400	1000	1402		
	2	50	100000	Petty Cash	55.00-	EUR							
	3	40	154000	Input Tax	5.00	EUR	1l						

FB03

^ Figure 5: Without Assignment of a Scenario

The *Purchased Services* account (417000) is defined as a primary cost element in CO, and therefore requires a CO-relevant account assignment when posting to. The profit center and the functional area are derived from a CO object, for example, a cost center. Now, with new G/L, the segment is derived from the profit center.

Information about scenarios:

- If you do not assign any scenarios, none of the entities will be inherited in the new G/L totals table.
- The impact of a missing scenario assignment would be that if you call up a balance sheet (and profit & loss statement), the system displays the amount of EUR 50.00 on the Activities Purchased account and not on business area, functional area, profit center, or any other entity. Therefore, it is also impossible to call up segment financial statements if you have not assigned any scenarios to a ledger.
- If you make any subsequent changes in the scenario assignments to a ledger in General Ledger Accounting, it can result in serious inconsistencies in document processing.
- If you delete scenario assignments, it can also result in inconsistencies. An appropriate warning message appears when you try to make these changes in Customizing.

This is an excerpt from SAP Note 891144 – New G/L / Document Splitting: Risks w/ subsequent changes: In contrast with the special ledger or the EC-PCA, subsequent changes are not considered in the general ledger (new) since the ledgers of the general ledger (new) are not comparable with a special ledger or the EC-PCA. In fact, the general ledger (new) is a general ledger from a business point of view and is therefore legally comparable with the classic General Ledger, the GLT0 ledger 00. Thus, there is an auditing requirement.

With Assignment of a Scenario



Displayed Business Transaction: General ledger view of an FI document, **with** previous **assignment** of the scenarios *Profit Center Update* and *Segment Reporting for the leading ledger*.

Display Document: General Ledger View

Taxes Entry View

Document number: 1000000001 Company code: 1000 Fiscal year: YYYY
 Document date: DD.MM.YYYY Posting date: DD.MM.YYYY Period: M

Ledger: 0L Document: 1000000001 Fiscal year: YYYY Period: M

CCd	P	PK	Acct	Name	Amount	Cur.	B	GB	FKBER	CCTR	PC	Segment
1000	1	40	417000	Service descr.	50.00	EUR	11				1000	SEG A
	2	50	100000	Cash Fund	55.00-	EUR						
	3	40	154000	Input Tax	5.00	EUR	11					

FB03

Figure 6: With Assignment of a Scenario

As you assign the *Profit Center Update* and *Segment Reporting* scenarios to the leading ledger, OL, the system updates these two entities in the general ledger and displays them in the corresponding general ledger view. For example, the *Functional Area* field is not updated or displayed in the general ledger view, since this scenario was not previously assigned to the leading ledger.

However, scenario assignment alone cannot manage a zero balance setting for any given entity. In more detail, using a profit center as an example, you cannot create complete profit center financial statements yet, because there is no data for the profit center in posting lines 2 and 3. To achieve this, you have to configure and activate document splitting.

Segments



The segment field or characteristic has the following features:



- It is a new standard account assignment object that is available with SAP ERP in Financial Accounting.
- It is used to create evaluations for objects or entities below company code level.
- The most important objective of segments is segment reporting.



The following alternative account assignments are available to cover segment reporting:



- Profit center
- Business area
- Profitability segment of CO-PA
- User-defined field

Using the Segment Entity

Segments can be used to fulfill the requirements of international accounting regulations (IFRS or US-GAAP) regarding segment reporting.

Excerpt from IFRS 8: Operating Segments

- An operating segment is a component of an entity that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity);
- An operating segment is a component of an entity whose operating results are reviewed regularly by the entity's chief operating decision-maker to make decisions about resources to be allocated to the segment and assess its performance; and
- An operating segment is a component of an entity for which discrete financial information is available.

Another reason to use segments is that the business area and/or profit center were used for other purposes in the past, and therefore, fulfill other requirements.

Document Splitting



Functions available in the SAP System (as of release mySAP ERP 2004) that allow you to create financial statements for profit centers:

- The **"Profit Center"** field is by default part of the totals table of the new general ledger (=> FAGLFLEXT)
- **New FI drilldown reports make it possible to call up financial statements for profit centers**

SE16: FAGLFLEXT	



Requirement: Posting with different profit centers

Entry View	CCode	It	PK	Account	Name	Amount	Cur.	Profit Center
1000	1	31	1000	Vendor X	11,000-	EUR		
	2	40	417000	Service descr.	4,000	EUR	PC A	
	3	40	417000	Service descr.	6,000	EUR	PC B	
	4	40	154000	Input tax	1,000	EUR		

Solution: Document splitting

Figure 7: Document Splitting – Reasons

It is not necessary for the expense lines to contain different profit center assignments. The root of the requirement is that, for example, the payable items line (of the general ledger view) must have a profit center account assignment if you want to create proper profit center financial statements.

Document Splitting Characteristics



Standard FI document splitting characteristics:

- Business Area
- Profit Center
- Segment

Note: You can also use user-defined characteristics

Document Splitting Characteristics for General Ledger Accounting:

Field	Zero balance	Mandatory field	...
PRCTR Profit Center	<input type="checkbox"/>	<input type="checkbox"/>	...
SEGMENT Segment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	...

SPRO

Figure 8: Document Splitting Characteristics

You have to specify the characteristics for which you want to carry out document splitting. You define the document splitting characteristics in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Business Transactions* → *Document Splitting* → *Define Document Splitting Characteristics for General Ledger Accounting*.

The system uses the assigned scenarios to propose document splitting characteristics. If you decide to use more splitting characteristics, make sure that they are contained in at least one ledger. If you want to create a balance sheet for the characteristic, select the *Zero balance* checkbox. This ensures that the balance of these entities is set to 0 in each posting, which makes an entity balance sheet possible.

The mandatory field indicator has the following meanings:

- It extends the field status for accounts whose characteristics are not ready for input during document entry, or for accounts that you cannot control using the field status. For example, the vendor line should always contain a profit center or segment.
- It checks whether a business transaction variant that is equivalent to a business process is used (and therefore, a splitting rule can be found).

Activation of Document Splitting



- **Document splitting** is initially activated in Customizing **across all clients**
- **In a further step** (in the dialog structure) you can activate/deactivate splitting **in each company code** in the same transaction

Activating Document Splitting

Document Splitting

Method Splitting: Like 0000000002

Detail control

Inheritance

Standard Account Assignment Constant

SPRO

- **Inheritance** means that when you create a customer invoice from one revenue line, for example, the (unique) characteristics are projected (=> inherited) to the customer and tax lines in the general ledger view, even if, no splitting rule can be found.
- The **default account assignment** can be used to replace all account assignments that could not be derived from the posting with a constant "value".

Figure 9: Activating Document Splitting

You activate document splitting in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Business Transactions* → *Document Splitting* → *Activate Document Splitting*.

The standard splitting method 0000000012 is delivered by SAP. If you activate document splitting, there is no reason why you should not activate inheritance as well. Activating inheritance allows you to post documents without having to make any other changes in Customizing if the characteristics of a document are unique.

If you want to use a standard account assignment in document splitting, you must first create a new constant in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Business Transactions* → *Document Splitting* → *Edit Constants for Nonassigned Processes*.

Document Splitting – Active Split



Mapped business transaction:

- **Vendor invoice** with **multiple expense line items** and different account assignments (with 10% tax).

Entry View:

CCd	P	BS	Acc.	Description	Amount	Curr.	Tx	CCtr	PC	Segment
AA00	1	31	1000	Miller Inc.	11,000.00-	EUR	1I			
	2	40	477000	Advert. Costs	1,000.00	EUR	1I	1000	1000	SEGA
	3	40	417000	Purch. Services	9,000.00	EUR	1I	4140	1402	SEG B
	4	40	154000	Input Tax	1,000.00	EUR	1I			

General Ledger View:

CCd	P	BS	Acc.	Description	Amount	Curr.	Tx	CCtr	PC	Segment
AA00	1	31	160000	Vendor Payable	1,100.00-	EUR	1I		1000	SEGA
	2	40	477000	Advert. Costs	1,000.00	EUR	1I	1000	1000	
	4	40	154000	Input Tax	100.00	EUR	1I		1000	
	1	31	160000	Vendor Payable	9,900.00-	EUR	1I		1402	SEG B
	3	40	417000	Purch. Services	9,000.00	EUR	1I	4140	1402	
	4	40	154000	Input Tax	900.00	EUR	1I		1402	

Layout sorted by segment in ascending order

Figure 10: Document Splitting – Active Split

The entities that you defined as document splitting characteristics are inherited to the posting lines without account assignment. As you can see in the figure, the selected characteristics balance to zero. In this rule-based split, the vendor and tax lines (items 1 and 4) are split in the same way as the expense lines or the expense basic item category (items 2 and 3; expense accounts 477000 and 417000) in the general ledger view.

Document Splitting – The Splitting Logic of an Active Split

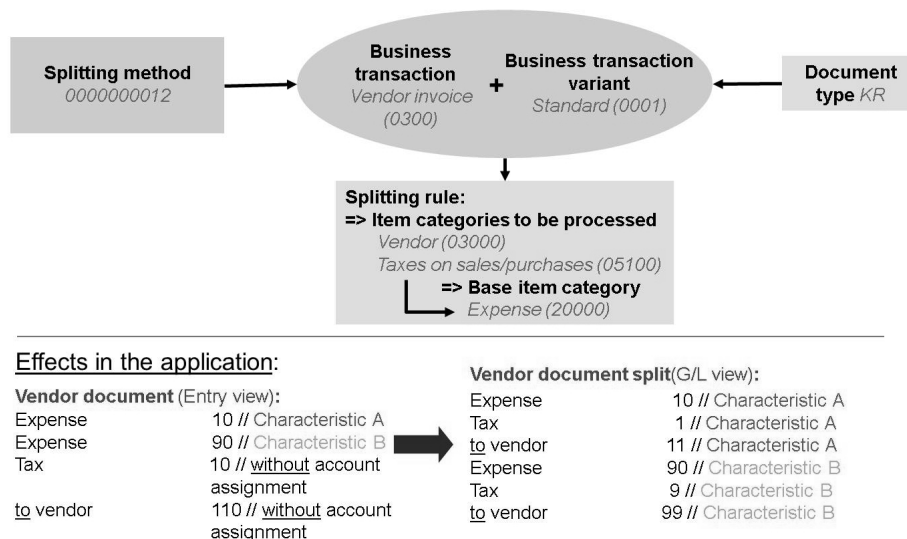


Figure 11: Document Splitting – The Splitting Logic of an Active Split

The figure illustrates the document splitting logic by using a vendor invoice as an example. In the figure, basic terms are in bold and specific example data is italicized.

Document Splitting – Zero Balance Formation



Displayed Business Transaction:

- **G/L account posting** – Transfer posting within an account

System Configuration:

- Scenarios *Profit Center Update* and *Segmentation* are assigned
- Document splitting activated - Document splitting characteristics *Profit Center* and *Segment* have been defined

Entry View:

CCd	P	PK	Acct	Name	Amount	Cur.	B	CCtr	Segment	PC
1000	1	40	113100	Bank	10,000.00	EUR			SEGA	PC A
	2	50	113100	Bank	10,000.00-	EUR			SEGA	PC B

General Ledger View/Ledger

CCd	P	PK	Acct	Name	Amount	Cur.	B	CCtr	Segment	PC
1000	1	40	113100	Bank	10,000.00	EUR				PC A
	3	50	194500	Clear. Segment	10,000.00-	EUR				
	2	50	113100	Bank	10,000.00-	EUR				PC B
	4	40	194500	Clear. Segment	10,000.00	EUR				

Layout sorted (in ascending order) by profit center

Figure 12: Document Splitting – Zero Balance Formation

A document splitting method is the sum of all the document splitting rules of all business transactions. A document splitting method defines the way in which a document split should be carried out. This means that each method contains a definition that describes how the individual item categories are to be treated in the individual business transactions; for example, whether the system should copy the account assignment of a customer item from a revenue item to a customer invoice.

A business transaction is a general subgroup of actual business processes, which is delivered by SAP and to which extensive item categories are assigned. The business transaction variant is a specific version of the business transaction provided by SAP, and is a (technical) representation of a real business process for document splitting.

An item category is a (technical) representation of the posted document lines. It describes the items that you can find within a document (a business transaction). Some of the item categories are derived by the system from the account type of the G/L account others have to be defined in Customizing. In other words, an item category is the semantic description of a posting line for document splitting. The individual splitting rules define which item categories can or should be split (item categories to be edited), and at the same time, determine the basis on which the split can take place (base item categories).

Simulating the General Ledger View



Simulate document (Entry View):

Document Date: 11.05.2006, Type: KR
 Posting Date: 11.05.2006, Period: 5
 Document Number: INTERNAL, Fiscal Year: 2006

Item	PK	Account	Description
1	31	30500	Zimmermann GmbH
2	40	477000	Advertising and Sale
3	40	417000	Purchased services
4	40	154000	Input tax

Simulate document (G/L View):

Document Date: 11.05.2006, Posting Date: 11.05.2006, Fiscal Year: 2006
 Reference: EUR, Cross-co. code no.: Ledger Group, Posting Period: 5, Ledger: 0L

Co	Item	L. Item	PK	S	G/L Account	G/L account name	z	Amount	Curr.	Profit Ctr
AA00	1	000001	31		160000	AP-domestic		9.900,00	EUR	1000
AA00	3	000004	40		417000	Purchased services		9.000,00	EUR	
AA00	4	000005	40		154000	Input tax		900,00	EUR	
								0,00	EUR	1000
AA00	1	000002	31		160000	AP-domestic		1.100,00	EUR	1402
AA00	2	000003	40		477000	Advertising and Sale		1.000,00	EUR	
AA00	4	000006	40		154000	Input tax		100,00	EUR	
								0,00	EUR	1402
								0,00	EUR	

Menu path: Document, Simulate General Ledger

Figure 13: Simulating the General Ledger View

As of SAP ERP 6.0, you can simulate the general ledger view as well as the entry view before posting. This allows you to analyze errors that would cause a termination during posting earlier and more effectively. You can display the detailed data of the document split using the expert mode.

Document Simulation – Expert Mode



Document Date: 11.05.2006, Posting Date: 11.05.2006, Fiscal Year: 2006
 Reference: EUR, Cross-co. code no.: Ledger Group, Posting Period: 5, Ledger: 0L

Co	Item	L. Item	PK	S	G/L Account	G/L account name	z	Amount	Curr.	Profit Ctr
AA00	1	000001	31		160000	AP-domestic		9.900,00	EUR	1000
AA00	3	000004	40		417000	Purchased services		9.000,00	EUR	
AA00	4	000005	40		154000	Input tax		900,00	EUR	
								0,00	EUR	1000
AA00	1	000002	31		160000	AP-domestic		1.100,00	EUR	1402
AA00	2	000003	40		477000	Advertising and Sale		1.000,00	EUR	
AA00	4	000006	40		154000	Input tax		100,00	EUR	
								0,00	EUR	1402
								0,00	EUR	

Figure 14: Document Simulation – Expert Mode

The features of the expert mode are as follows:

- The expert mode provides information about the configuration of document splitting, such as the splitting method, business transactions, and business transaction variant.
- The expert mode provides more details and useful information on what configuration rules were used, and how the amount is split for the new lines that are created.

Expert Mode – Document Splitting Configuration

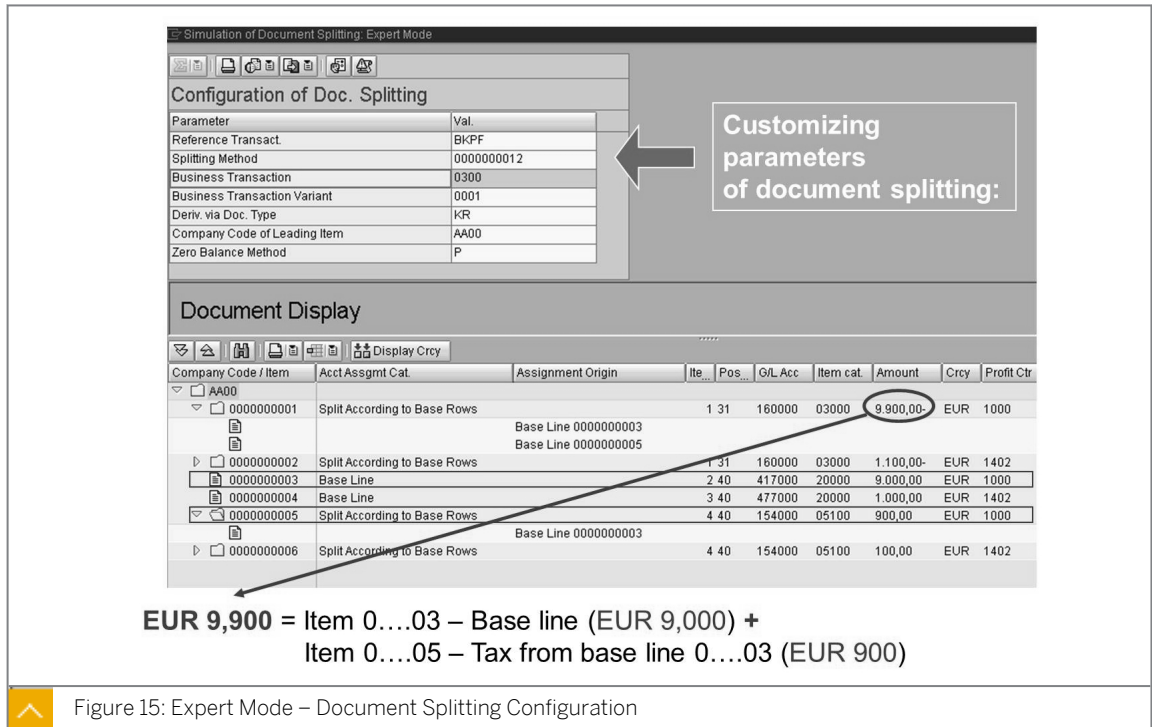


Figure 15: Expert Mode – Document Splitting Configuration

From the document display, you can branch to expert mode, which shows more details pertaining to the configuration of document splitting.

Real-Time Integration of Controlling with Financial Accounting

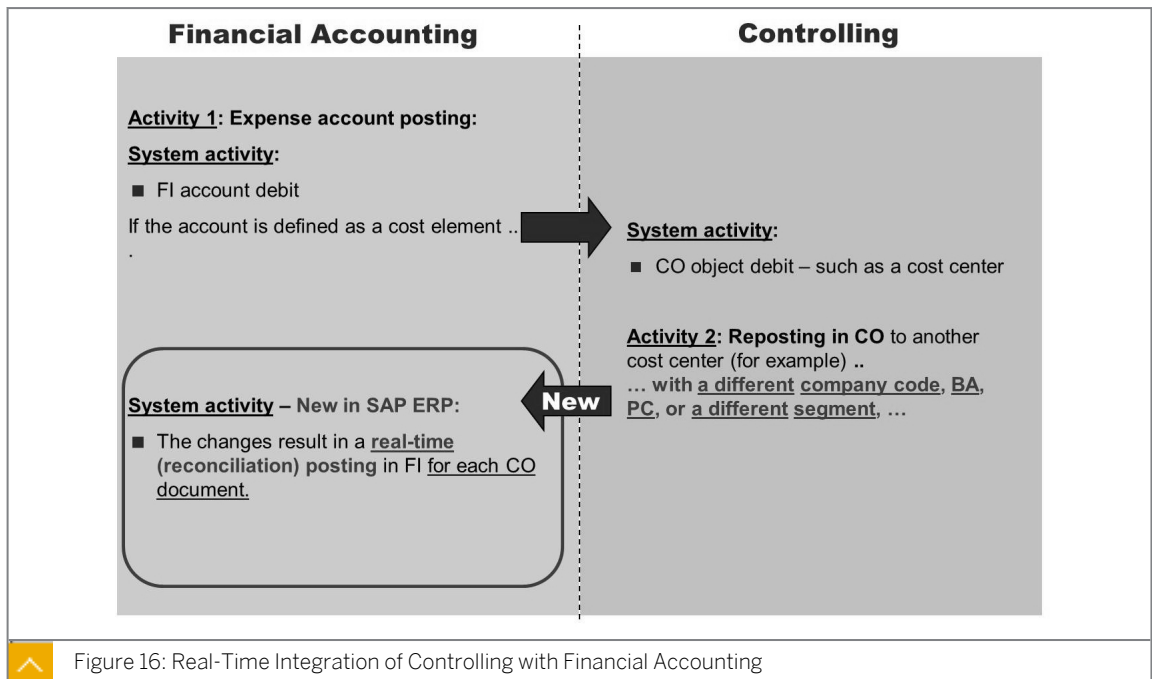


Figure 16: Real-Time Integration of Controlling with Financial Accounting

Real-time integration from FI to CO has been available for a long time. Real-time Integration from CO to FI is realized within new G/L by means of the "Real-time Integration of CO with FI".

CO processes or transactions that may affect FI characteristics are as follows:

- Periodic clearings (assessment, distribution, reposting)
- Manual repostings in CO [transaction code `KB11 (N)`]
- Activity allocations [transaction code `KB21 (N)`]
- Settling orders or projects [transaction codes `KO88` and `CJ88`]

Many postings created in CO do not affect FI. These postings do not update any general ledger account transaction figures. However, postings or allocations in CO may lead to a change in a characteristic relevant for FI, and you have to transfer the postings.

Typical FI characteristics that maybe affected by CO changes are as follows:

- Profit center
- Segments
- Functional areas
- Business areas
- Cost centers
- Company codes

Depending on the requirement in FI, you can define and assign the characteristics in Customizing.

Variants for Real-Time Integration



You can use Customizing for real-time integration to define variants that define (for example):

- The criteria for which you want to use real-time integration
- When the real-time integration should be activated

Real-Time CO-FI Integration

Real-time int. active Key date: Active from: **DD.MM.YYYY**

Acct. determ. active

.....

Select document lines for CO->FI integration:

Use checkboxes

<input checked="" type="checkbox"/> Cross-company code	<input type="checkbox"/> Cross-profit center
<input type="checkbox"/> Cross-business area	<input checked="" type="checkbox"/> Cross-segment
<input checked="" type="checkbox"/> Cross-functional area	<input type="checkbox"/> Cross-fund
<input type="checkbox"/> Cross-receivables	

.....

Trace active

SPRO

Figure 17: Variants for Real-Time Integration

You define the variants for real-time integration of CO with FI in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Ledgers* → *Real-Time Integration of Controlling with Financial Accounting* → *Define Variants for Real-Time Integration*.

In a subsequent step, you assign the variant to your company code(s).

To determine the characteristic changes for which real-time FI document lines need to be created, you can also define Boolean rules in addition to the checkboxes, or implement your own logic by programming a Business Add-In (BAdI). It is impractical to select characteristics that were not originally assigned to at least one ledger using the scenarios.

The key date activation date determines the time (or date of the CO document posting) after which you can execute the reconciliation between CO and FI using real-time integration. You can also generate FI documents for the CO documents that were entered before the activation of new G/L. You must define an account determination procedure to be able to transfer secondary cost elements from CO to FI.

You maintain account determination in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New) → Ledgers → Real-Time Integration of Controlling with Financial Accounting → Define Account Determination for Real-Time Integration*.

You can also transfer primary costs to FI using account determination, which works with the original cost elements.



Hint:

In the standard system, you can assign only one general ledger account per CO transaction, for example, for CO transaction `KAMV` (manual cost allocation). If the standard account determination is not as detailed as required, you are able to use or define substitution rules.

Using account determinations not only works for secondary cost elements. You can also define to use it for primary cost elements by selecting the *Account determination for primary cost elements* checkbox.

Example:

The real-time integration for cost element 470000 should not post to the original cost element; rather, it should use an alternative G/L account C470000.

Sample substitution:

Prerequisite: `RCL_ICCF-RACCT = 470000`

Substitution: Constant value for G/L account = C470000

Real-Time Integration – Example

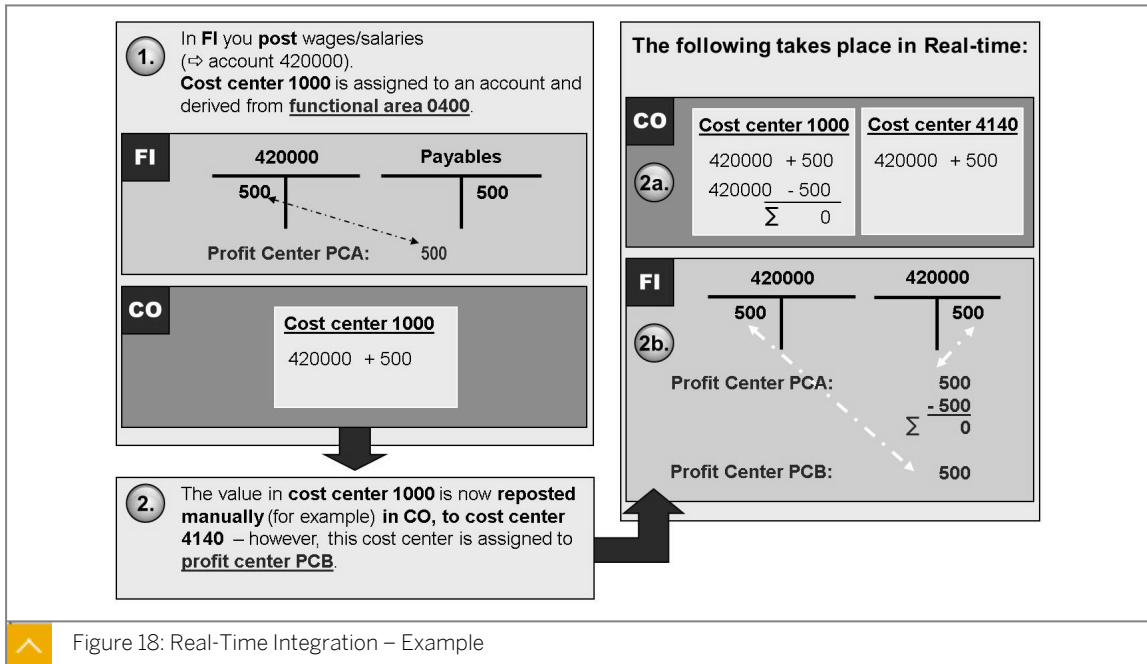


Figure 18: Real-Time Integration – Example

This figure illustrates real-time integration of CO with FI based on the profit center characteristic. The functional area, segment, and business area characteristics are not considered in the example. The FI document (2b.) is posted in real-time (for each CO document). This figure omits the clearing accounts for each profit center. You need these clearing accounts if the profit center represents an independent accounting unit. You define them in account determination for real-time integration.



Evaluate Global Settings for New General Ledger Accounting

Business Example

Your company wants to report full profit center financial statements at product level. You need to check whether the settings for new G/L in the test system allow this.

You need to check the settings in the test system for ledger definition, document splitting, and real-time integration.

1. Are you able to evaluate profit centers in new G/L with the current system settings? Verify the scenarios assigned to leading ledger OL.
2. Is the system customized in a way that you are able to create complete financial statements on profit center level?
3. Regarding the system settings, is it in company code 1000 possible to create FI follow-on documents for CO postings with secondary cost elements?



Evaluate Global Settings for New General Ledger Accounting

Business Example

Your company wants to report full profit center financial statements at product level. You need to check whether the settings for new G/L in the test system allow this.

You need to check the settings in the test system for ledger definition, document splitting, and real-time integration.

1. Are you able to evaluate profit centers in new G/L with the current system settings? Verify the scenarios assigned to leading ledger OL.
 - a) Verify the assigned new G/L scenarios in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Ledgers* → *Ledger* → *Assign Scenarios and Customer Fields to Ledgers*.
 - b) On the *Display View "Ledgers": Overview* screen, select the leading ledger OL.
 - c) Double-click *Scenarios* from the dialog structure.
 - d) Verify if at least the *Profit Center Update* scenario is assigned.
2. Is the system customized in a way that you are able to create complete financial statements on profit center level?
 - a) Define document splitting characteristics in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Business Transactions* → *Document Splitting* → *Define Document Splitting Characteristics for General Ledger Accounting*.
 - b) On the *Change View "Documents Splitting Characteristics for General Ledger": 0* screen, verify that the *Zero balance* and *Mandatory field* checkbox for the profit center line is flagged.
3. Regarding the system settings, is it in company code 1000 possible to create FI follow-on documents for CO postings with secondary cost elements?
 - a) Verify the assignment of a variant for real-time integration of CO with FI for company code 1000 in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Ledgers* → *Real-Time Integration of Controlling with Financial Accounting* → *Assign Variants for Real-Time Integration to Company Codes*.
 - b) On the *Change View "Assignment of Variants for Real –Time integration for CoCo* screen, verify the variant for real-time integration assigned to company code 1000.
Result: Variant EZI
 - c) Verify in the EZI variant that the account determination for real-time integration of CO with FI is activated in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Ledgers* → *Real-Time Integration of Controlling with Financial Accounting* → *Define Variants for Real-Time Integration*.

- d) On the *Change View "Variants for Real-Time Integration CO → FI": Details* screen, verify that the *Acct Deter.: Active* checkbox (for activated account determination) is selected.



LESSON SUMMARY

You should now be able to:

- Describe the global settings for new General Ledger Accounting



Learning Assessment

1. The totals table in new General Ledger Accounting is known as _____.

Choose the correct answer.

- A FAGL_SPLINFO
- B FAGLFLEXT
- C FAGLFLEXA
- D FAGLFLEXP

2. The _____ is a new standard account assignment object, which is available as of SAP ERP in Financial Accounting.

Choose the correct answer.

- A new General Ledger Accounting
- B segment
- C scenario
- D profit center



Learning Assessment - Answers

1. The totals table in new General Ledger Accounting is known as _____.

Choose the correct answer.

A FAGL_SPLINFO

B FAGLFLEXT

C FAGLFLEXA

D FAGLFLEXP

2. The _____ is a new standard account assignment object, which is available as of SAP ERP in Financial Accounting.

Choose the correct answer.

A new General Ledger Accounting

B segment

C scenario

D profit center

Lesson 1

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Lesson 2

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UNIT OBJECTIVES

- Create a profit center standard hierarchy and master data
- Assign profit centers to different SAP objects



Maintaining Profit Center Master Data

LESSON OVERVIEW

This lesson explains how to define profit centers and other master data in Financials.



Explain the settings required in the Controlling (CO) area for Profit Center Accounting (PCA). Also, explain how to maintain profit center master data and assign profit centers to the master data in the SAP system.

Business Example

Your project team wants to find out about the master data definition of profit centers in new General Ledger Accounting (new G/L). You want to find out about the technical settings to present them at a project meeting. For this reason, you require the following knowledge:

- An understanding of how to create a profit center standard hierarchy
- An understanding of how to maintain profit center master data



Explain the content from a business perspective using the technical settings in the system.

Use the following menu paths to show the settings that have to be made in each CO area:

- Define the profit center standard hierarchy in the CO area in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Master Data → Profit Center → Define Profit Center Standard Hierarchy in Controlling Area*.
- Define the standard hierarchy in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Master Data → Profit Center → Define Standard Hierarchy*.

Use CO area *1000* as an example.

Explain the use of dummy and default profit centers and profit center groups in the system.

PCA in new G/L is active in CO area *1000*.

If you want to show how to activate PCA in a new system, you can use CO area *R100*. None of the settings for PCA have been made here yet.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Create a profit center standard hierarchy and master data

Profit Center Standard Hierarchy

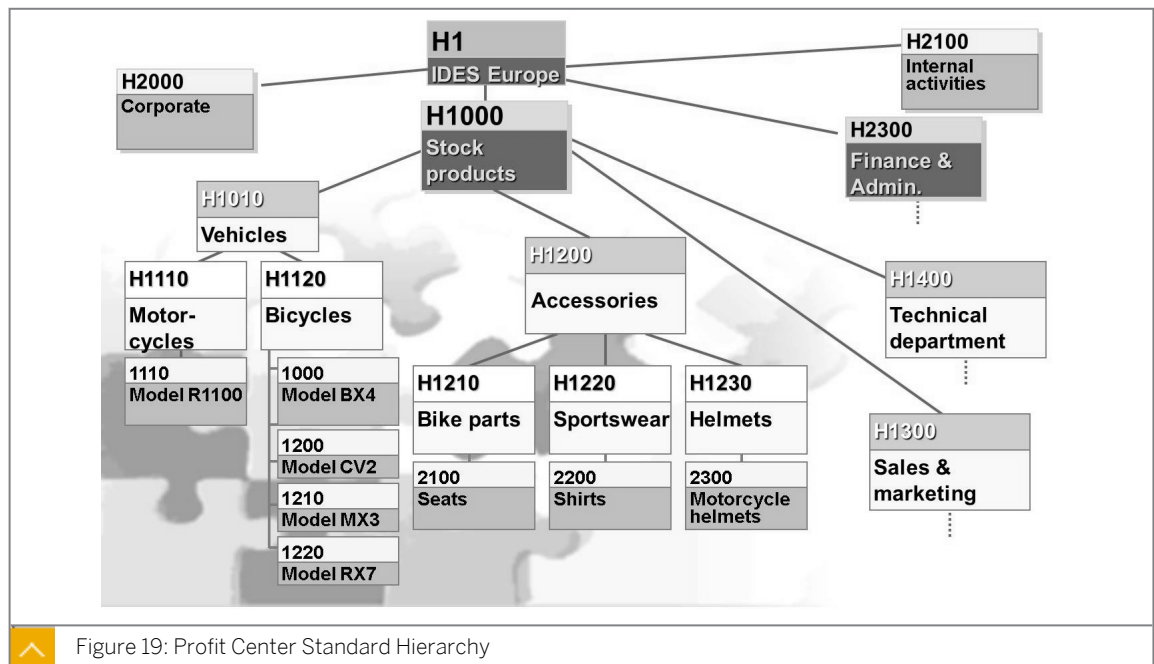


Figure 19: Profit Center Standard Hierarchy

To create a profit center, you first have to define a hierarchical profit center structure using the following menu paths:

- You define the profit center standard hierarchy in the Controlling (CO) area in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Master Data* → *Profit Center* → *Define Profit Center Standard Hierarchy in Controlling Area*.
- On the SAP Easy Access screen, choose *Financial Accounting* → *General Ledger* → *Master Records* → *Profit Center* → *Standard Hierarchy* → *Create*.

This structure, called the standard hierarchy, is a tree structure that contains all the profit centers in a CO area. When you create a profit center, you have to assign it to a hierarchy area (hierarchy node) in the standard hierarchy. This ensures that all the profit centers in the CO area end at the same node.

The first step is to establish the name of the standard hierarchy for the profit centers. The system creates the top node or group of the standard hierarchy automatically when you save your settings. You can then maintain it to create the lower level nodes required to complete your hierarchy.

You can maintain the standard hierarchy in *Customizing* or from the application menu.

In addition to the standard hierarchy, you can also define profit center groups (alternative hierarchies), which you can use in reporting, planning, and allocation.

Profit Center Structure

The profit center structure is based on the following aspects:

- Regional profit center structure (sales-oriented)
- Functional profit center structure
- Product-related profit center structure

- Business unit profit center planning

Profit Center Accounting (PCA) supports a division of an enterprise into areas of responsibility for profits.

You can divide your enterprise based on the following aspects:

- Geographical structure of profit centers (locations, regions, and so on)
- Product-related structure of profit centers (divisions, product lines, and so on)
- Functional structure of profit centers (production, sales, research, and so on)

Mixed forms of these structures are also possible. For example, you can opt for a regional structure based on business locations and then subdivide each location by the products made there.

You create the profit center master data to define the organizational structure. For evaluations at a higher level of aggregation, you can combine profit center groups. The standard hierarchy is a special profit center group. In addition, you can define alternative groups.



How to Create a Profit Center Standard Hierarchy

1. Create the **GROUP##** profit center group with the **Group ## Profit Centers** as the description outside the standard hierarchy. Assign the following profit centers:

Profit Center Group	Assigned Profit Centers
GROUP## Group ## Profit Centers	611## pump division
	612## pump production

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *Profit Center* → *Profit Center Group* → *Create*.
- b) On *Create Profit Center Group: Initial Screen*, enter **GROUP##** in the *Profit Center Group* field.
- c) Press ENTER.
- d) On the *Create Profit Center Group: Structure* screen, enter **Group ## Profit Centers** as the description.
- e) Press ENTER.
- f) Choose the top node **GROUP##** and choose *Edit* → *Profit Center* → *Insert Profit Center*.
- g) On the *Create Profit Center Group: Structure* screen, enter profit centers **611##** and **612##** on separate lines.
- h) Save the **GROUP##** profit center group.

Profit Center Master Data

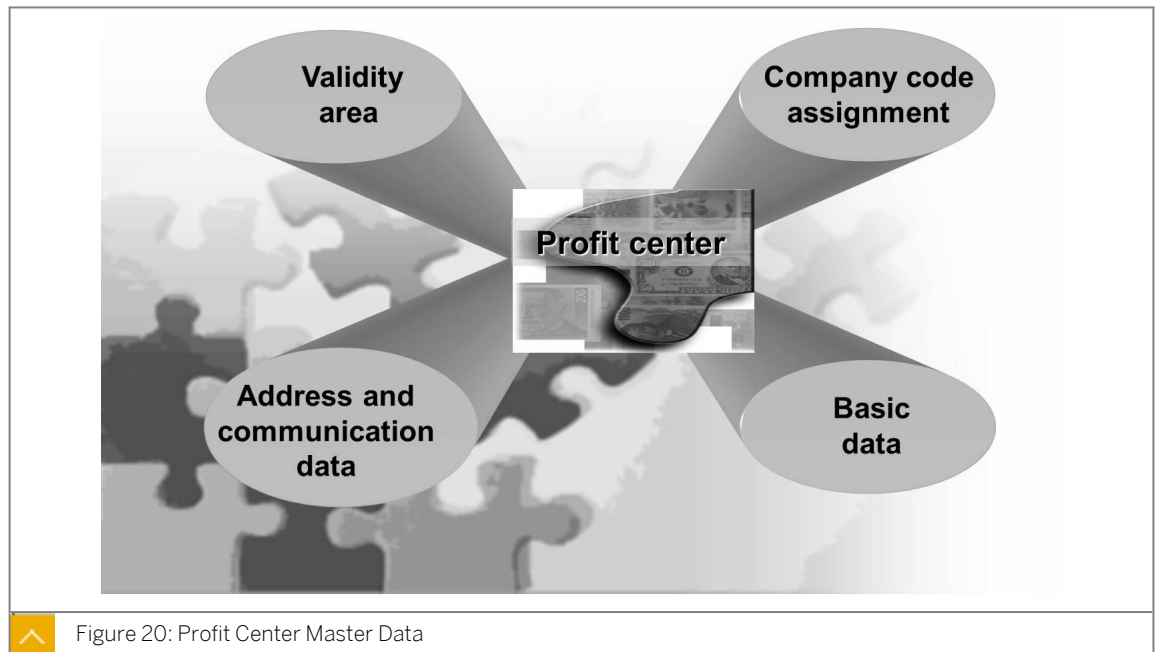


Figure 20: Profit Center Master Data

A profit center is defined at CO area level. When creating a profit center, you enter the name of the profit center and the period of validity. Profit center master data is time dependent, which means that you can create different data for different periods. You can copy master data information from an existing profit center.

You maintain the important master data, such as the profit center name and description, person in charge, and department, on the Basic screen. The *Hierarchy Area* field defines the assignment to a node in the standard hierarchy.

By selecting the lock indicator, you can lock the profit center against postings for the specified time interval. If an account assignment object is assigned to a locked profit center and you attempt to post to it, the system displays an error message and does not post the data.

You can enter more information for the profit center, such as the address and communication data and a long text on additional screens.

By default, a profit center is assigned to all the company codes within the CO area. You can exclude certain company codes for a profit center by not selecting them. If you attempt to post data to profit centers in company codes that are not assigned to the profit center, the system will not carry out such postings.

You can create profit centers under the following menu path:

- On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *Profit Center* → *Individual Processing* → *Create*.
- You define profit centers in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Master Data* → *Profit Center* → *Define Profit Centers*.

Profit Center – The Dummy Profit Center

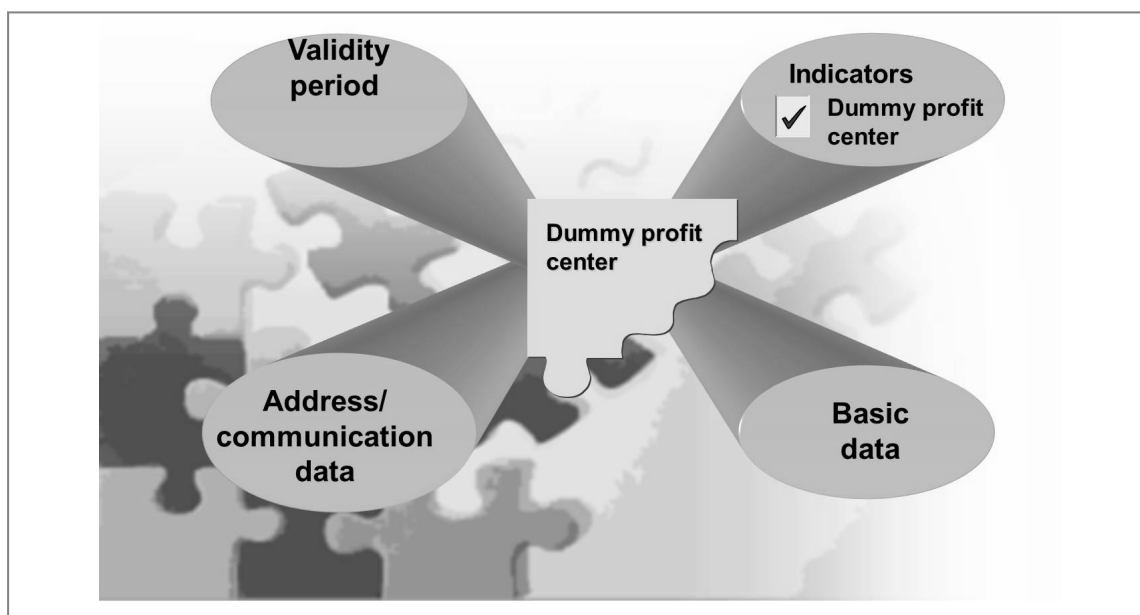


Figure 21: Profit Center – The Dummy Profit Center

The dummy profit center is the primary default value for postings to an account assignment object in an accounting area, if no other profit center is assigned. You can determine which objects are not assigned to profit centers by analyzing the postings assigned to the dummy profit center. You can also assess or distribute data from the dummy profit center to the desired profit centers.

In new G/L, in contrast to classic Profit Center Accounting (EC-PCA), you do not have to define or use a dummy profit center. Postings to account assignment objects that do not have assigned profit centers are simply made without profit centers, that is, the profit center field remains blank in the corresponding document items. Postings without profit centers can be assessed or distributed to the desired profit centers (similar to postings to a dummy profit center).

If you define a dummy profit center, make sure you do not use it as a default profit center. Define separate profit centers for this case instead. If you use document splitting using the dummy profit center, it may have the following effect: Payables can be allocated to the dummy profit center because of document splitting if no profit centers are assigned to the account assignments of the corresponding expense lines. You cannot repost the payables manually in this case. If you activate document splitting for profit centers, we recommend that you do not use a dummy profit center. If you want to make sure that a profit center account is assigned in all document lines, you can set the profit center as a required entry field in Customizing for document splitting. However, if you do so and there are postings to account assignment objects that do not have profit center assignments, a termination occurs with the “Accounting field segment is not filled in document line” error message. If you still use EC-PCA in parallel with new G/L, you have to define a dummy profit center.

Path for Creating the Dummy Profit Center

A special Customizing transaction is available to create the dummy profit center. You create the dummy profit center in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Master Data* → *Profit Center* → *Create Dummy Profit Center*.

This procedure is almost the same as that for creating normal profit centers.

The differences between a dummy profit center and a normal profit center are as follows:

- You do not specify a validity period for the dummy profit center. The dummy profit center is automatically valid for the maximum validity period.
- You cannot copy the dummy profit center from an existing profit center.
- A flag identifying the profit center as the dummy profit center is set automatically (in the indicator folder).

You change and display the dummy profit center using the normal maintenance transactions for profit centers.

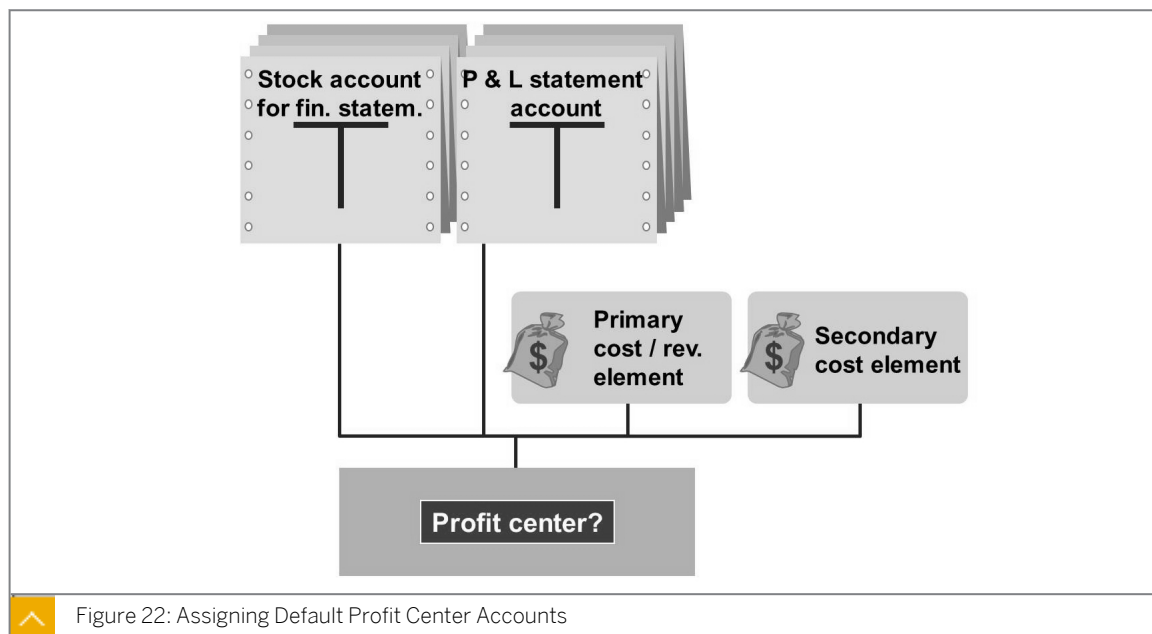
Assignment of Default Profit Center Accounts

Figure 22: Assigning Default Profit Center Accounts

Default profit centers do not reflect an organizational area of responsibility. They are used to collect costs, revenues, and postings to balance sheet accounts within a posting period. At the end of the period, you can assess or distribute the posted data from the default profit center to the desired profit centers.

Clearing profit centers are referred to as default profit centers. In contrast to dummy profit centers, default profit centers can be derived specifically from other information, such as the company code or account.

The procedure for creating master data for default profit centers is similar to the one you use to create master data for your true profit centers. Default profit centers have the same structure as all other profit centers.

Default Profit Center Definition

You can define default profit centers for each company code and account interval in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Master Data* → *Profit Center* → *Assign Default Profit Center to Accounts*.

The default profit center is derived under the following circumstances:


- If no profit center is specified in the posting

- If a profit center cannot be derived from the cost element by way of the cost center or the order, for example

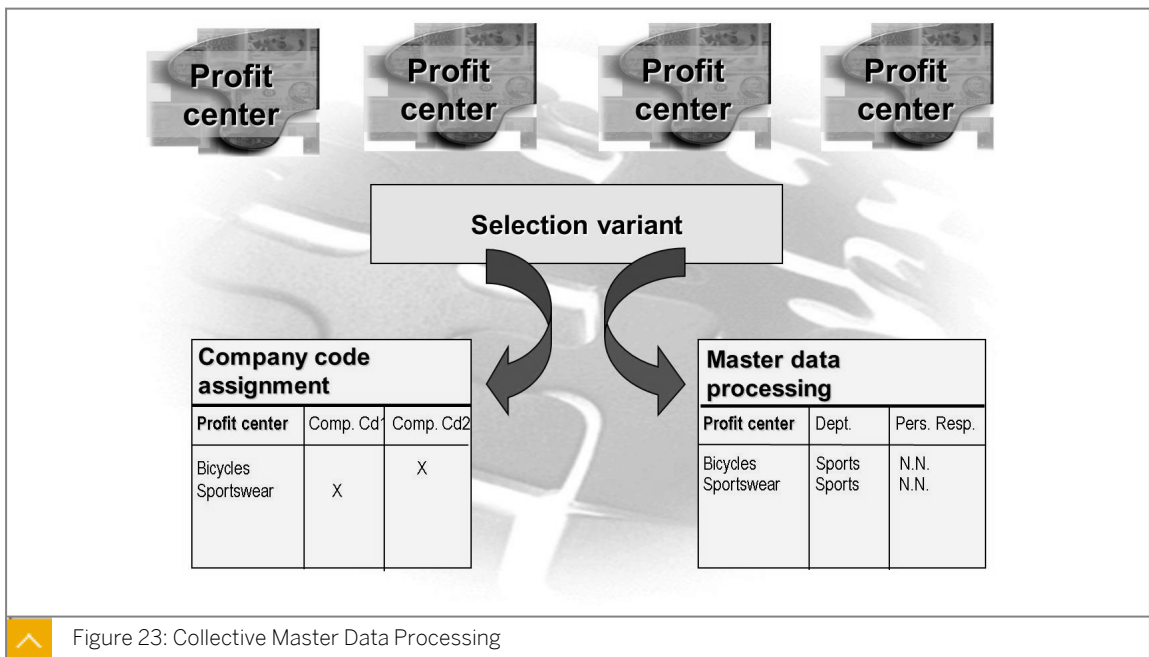
This means derivation is only helpful for profit and loss (P&L) and balance sheet accounts for which the profit centers are not derived or specified. Derivation takes place when the posting is made. You should only define default profit centers for accounts for which document splitting is not active. Select an account interval and assign the profit center to be derived. If you leave the *Account to* field blank, it is set to the same value as the *Account from* field.

If you use document splitting in new G/L, there is a similar function: the default account assignment. (You edit constants for nonassigned processes in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Business Transactions → Document Splitting → Edit Constants for Nonassigned Processes.*)

You can assign a default account (such as a profit center or segment) that is used whenever a profit center is missing in the item. If a default value (constant) is used, the quality of the dataset is poorer. You have to distribute the values of the transactions, which are reflected in the profit center at the end of the month, either through manual postings or allocation. If you use a default value, you should at least carry out the test phase of an implementation project without a default value to ensure that you detect potential errors in document splitting.


Note:
For more information, see SAP Note 826357.

Collective Master Data Processing



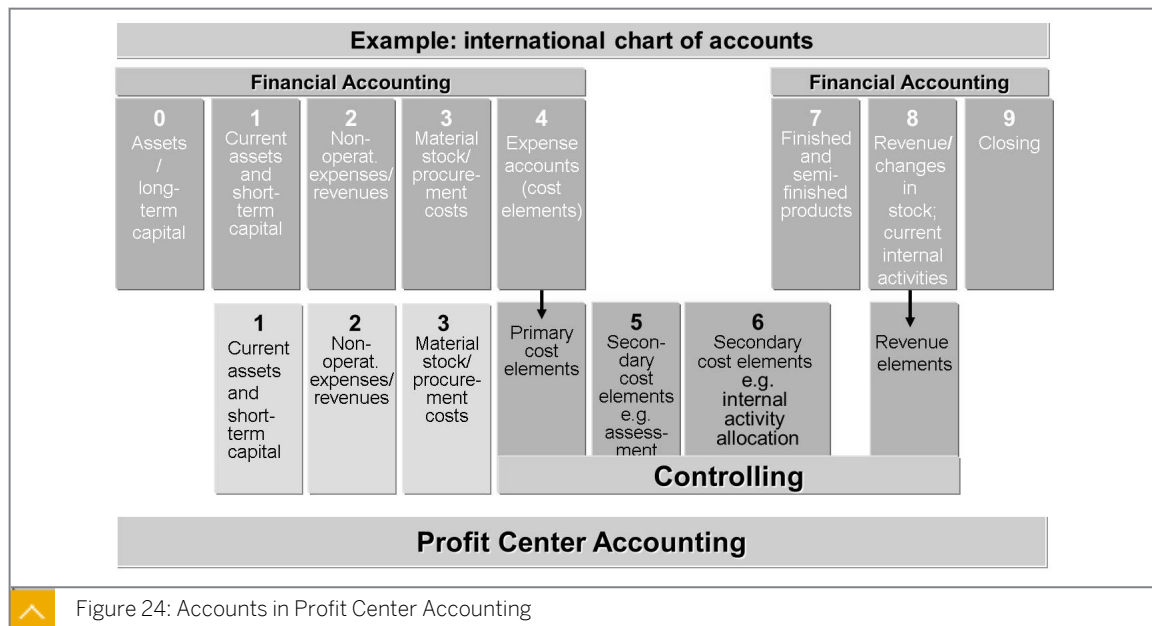
Collective processing is particularly useful when you adapt existing data to a change in circumstances, for example, if certain master data fields (such as the department and person responsible) or company code assignments have to be changed.

You can call collective processing in the following areas:

- On the SAP Easy Access screen, choose *Accounting → Financial Accounting → General Ledger → Master Records → Profit Center → Collective Processing → Master Data.*

- On the SAP Easy Access screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *Profit Center* → *Collective Processing* → *Company Code Assignment*.

Accounts in Profit Center Accounting



PCA is based on the chart of accounts that is assigned to Financial Accounting (FI).

These accounts include the following:

- Stock accounts

The system uses these accounts to display the liability and equity sides of the balance sheet. These accounts are not used in CO. For example, there is no material stock for cost centers in the standard system.
- Profit and loss accounts

The system uses these accounts to generate the P&L statement. If you want to use these P&L accounts in CO as well, you create primary cost elements in CO, for example, for material consumption by cost objects or cost centers.
- Secondary cost elements

These costs are generated through allocations within CO (allocation of machine hourly rates in production or assessment of overhead costs). While these costs are not offset by external consumption in the P&L statement from a business perspective, they can be transferred using real-time integration of Controlling with Financial Accounting to new G/L, and therefore to PCA.

Derivation of a Segment



The screenshot shows the 'Change Profit Center' dialog box in SAP. It is divided into two main sections: 'General Data' and 'Basic Data'. In the 'General Data' section, the 'Profit center' is set to '1000' and the 'Controlling area' is set to '1000'. In the 'Basic Data' section, the 'Responsible' is 'James Patterson', the 'Department' is 'Department IV', and the 'Hierarchy Area' is 'H1023'. The 'Segment' field is currently empty and is circled in black. The dialog box has a title bar with standard SAP icons and a footer with 'KES2'.

Figure 25: Derivation of a Segment

The US-GAAP and IFRS accounting principles require segment reporting. You can define segments in the SAP system in *Customizing for Enterprise Structure* under *Definition* → *Financial Accounting* → *Define Segment*. You can enter a segment in the master record of a profit center. The segment characteristic is only derived together with the profit center characteristic. If no segment is entered manually during posting (only possible in FI transactions), the segment is determined from the master record of the profit center. If you want to use different rules to derive the segment during posting, you can define your own.

You can find the relevant settings in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Tools* → *Customer Enhancements* → *Business Add-Ins (BAIs)* → *Segment Derivation*.

Document splitting is needed for creating financial and P&L statements for the segment dimension at any time. US-GAAP requires nearly complete financial statements at segment level for reporting (everything but equity capital). In this approach, the segment is defined as an area of a company whose activities result in expenses and revenues. Its operating result is reviewed regularly by the company and group management to assess its success and allocate resources. The IFRS segmentation requirements are nearly identical.

When you make a posting to the profit center, the posting is also made to the segment. In contrast to profit center logic, there is no dummy segment posting if the profit center has no segment. Then no segment assignment takes place. Deriving the segment from the profit center is the standard method.

Extended Derivation of a Segment

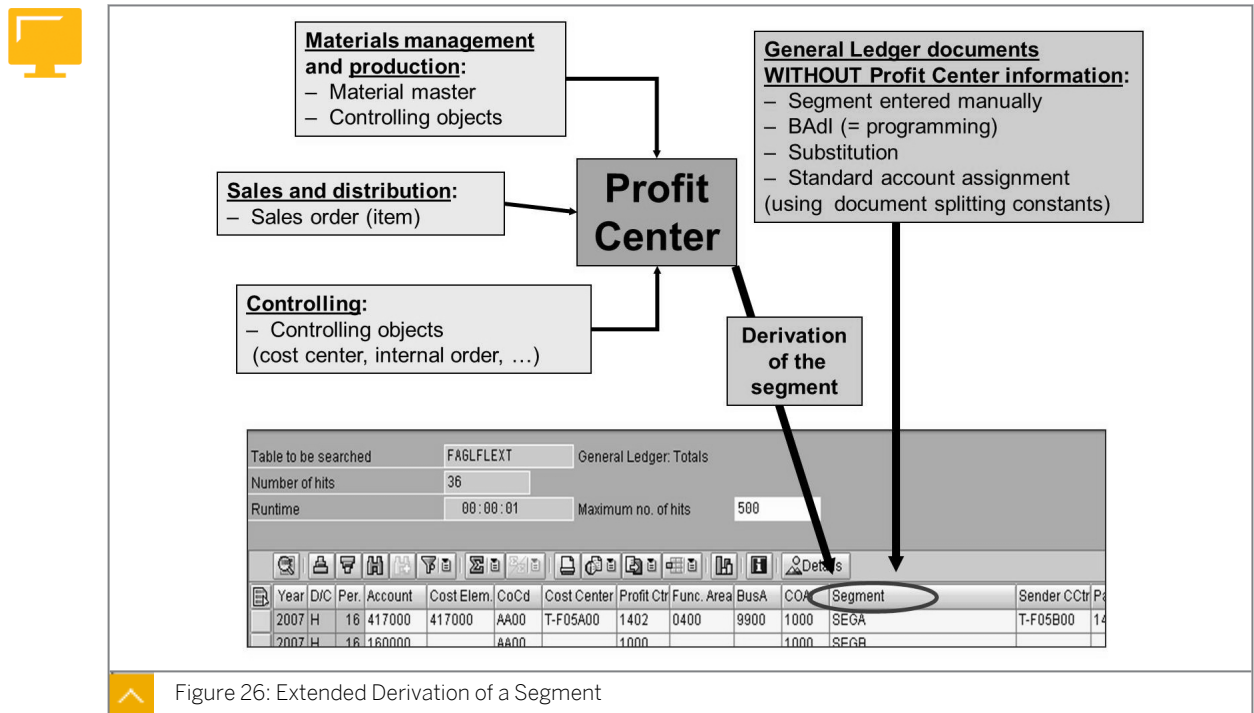


Figure 26: Extended Derivation of a Segment

The reason to derive the segment from the profit center is easy to explain: the profit center entity already exists in various other SAP objects. So, the segment can also be derived (through the profit center) easily.

For more information, see SAP Note 1035140. Officially, SAP only authorizes the use of segments if profit centers are used at the same time. The automatic derivation of segments is possible only with profit centers. Many business transactions, particularly in logistics, do not have an option for entering the segment manually. Moreover, several standard interfaces do not support segments. For these reasons, the use of segments is approved only if you also use profit centers. If it is not possible to derive the segment characteristic from a profit center master record, you have to find a different way to assign the segment accounts. Options include manual entry, BAdI implementation (BAdI: FAGL_DERIVE_SEGMENT), defining substitution rules, and a standard account assignment (which involves document splitting). In addition to BAdI FAGL_DERIVE_SEGMENT, BAdI FAGL_DERIVE_PSEGMENT is also available for deriving the partner segment.

Statistical Key Figures



- **A measurable quantity that can be assigned to cost centers, activity types, overhead orders, business processes, and profit centers.**
- **Used as an allocation base ("tracing factor") in overhead cost allocations**
- **Two categories: type 1 = fixed value, type 2 = totals value**
- **Can be linked to the Logistics Information System (LIS)**

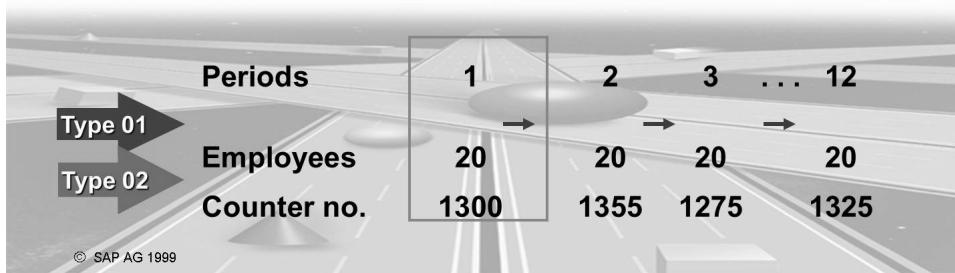


Figure 27: Statistical Key Figures

Statistical key figures are values or quantities (for example, the number of phone calls, m³ area, or number of employees) that provide further details about the setup, consumption, or performance output of cost centers, internal orders, processes, or profit centers.

You can post statistical key figures both in plan and actual.

You can use statistical key figures as an allocation base for periodic distributions or assessments and to create key figures (ratios such as personnel costs per employee).

You can define statistical key figures as either fixed values or totals (transaction code `KK01`), which means they are also available in new G/L.

The following are the statistical key figure categories:

- **Fixed value**
This is carried over from the period in which it is posted to all subsequent periods of the same fiscal year. You only have to enter a new posting when the value changes. Fixed values are defined when key figures remain constant over a significant period of time (such as the number of employees in a cost center).
- **Totals value**
This is not transferred to the following period but must be entered for each individual period, and is preferable for statistical key figures whose values fluctuate in individual periods (such as the power consumption in kWh).

Statistical key figures can be transferred from the Logistics Information System (LIS) by linking a key figure from LIS (such as order receipts) to a statistical key figure (such as in Cost Center Accounting).

Profit Center Groups

Profit center groups are alternative hierarchies to the standard hierarchy. You can use them in reporting, distribution and assessment, or various planning functions. In contrast to the standard hierarchy, these profit center groups do not have to contain all the profit centers in

the CO area. On the contrary, profit center groups allow you to select only certain profit centers and structure them hierarchically for more flexibility.

You can use the financial or P&L statement structure in the information system to display the report structures from FI in profit center reports.

Create profit center groups under the following menu paths:

- On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *Profit Center* → *Profit Center Group* → *Create*.
- You define profit center groups in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Master Data* → *Profit Center* → *Define Profit Center Groups*.

You can find the transactions used to maintain the cost element groups (such as KAH1) used in CO in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Master Data* → *G/L Accounts* → *Create Cost Element Groups*.



How to Create a Profit Center

Using the given data, create the profit center master data in the standard hierarchy, H1. Navigate to the node, *H1* → *HE* → *H9500* → *AC612*.

1. Create the following profit center master data:

Profit Center	Analysis Period	Name	Long text	Person Responsible	Segment
611##	01/01/cur. FY to 12/31/9999	pumps	pumps division	andy admin	MANF
611##	01/01/cur. FY to 12/31/9999	pump production	pump production division	paul pump	MANF

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *Profit Center* → *Standard Hierarchy* → *Change*.
- b) On the *Standard Hierarchy for Profit Centers Change* screen, navigate to the following node in the standard hierarchy:
H1 → *HE* → *H9500* → *AC612*
- c) Double-click node *AC612* and then choose *Edit* → *Create Profit Center*.
- d) Enter the data for the new profit center *611##* in the profit center table.
- e) Press ENTER.
- f) Create another profit center and enter the data for the new profit center *612##* in the profit center table.
- g) Press ENTER.



Create Profit Center Master Data in the Standard Hierarchy and Profit Center Groups

Business Example

Your company wants to set up product-oriented PCA to allocate revenue responsibility to the respective company units.

To do so, they set up separate profit centers for the production and product division areas. The first test is to be performed with a new division for high-capacity pumps.

Task 1

Create the following profit center master data in the standard hierarchy, H1. Navigate to the node, *H1* → *HE* → *H9500* → *AC612*.

1. Create the following profit center master data:

Profit Center	Analysis Period	Name	Long text	Person Responsible	Segment
611##	01/01/cur. FY to 12/31/9999	pumps	pumps division	andy admin	MANF
611##	01/01/cur. FY to 12/31/9999	pump production	pump production division	paul pump	MANF

2. Which activation status do these profit centers currently have and what are the consequences?
3. Activate the profit centers you created.
4. On the *Company codes* tab page, check whether your profit centers are assigned to company code 1000.
5. Why does the test system have a dummy profit center?

Task 2

You also need profit center groups for the information system.

1. Create the **GROUP##** profit center group with **Group ## Profit Centers** as description. Assign the following profit centers:

Profit Center Group	Assigned Profit Centers
GROUP## Group ## Profit Centers	611## pump division
	612## pump production



Create Profit Center Master Data in the Standard Hierarchy and Profit Center Groups

Business Example

Your company wants to set up product-oriented PCA to allocate revenue responsibility to the respective company units.

To do so, they set up separate profit centers for the production and product division areas. The first test is to be performed with a new division for high-capacity pumps.

Task 1

Create the following profit center master data in the standard hierarchy, H1. Navigate to the node, *H1* → *HE* → *H9500* → *AC612*.

1. Create the following profit center master data:

Profit Center	Analysis Period	Name	Long text	Person Responsible	Segment
611##	01/01/cur. FY to 12/31/9999	pumps	pumps division	andy admin	MANF
611##	01/01/cur. FY to 12/31/9999	pump production	pump production division	paul pump	MANF

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *Profit Center* → *Standard Hierarchy* → *Change*.
 - b) On the *Standard Hierarchy for Profit Centers Change* screen, navigate to the following node in the standard hierarchy:
H1 → *HE* → *H9500* → *AC612*
 - c) Double-click node *AC612* and then choose *Edit* → *Create Profit Center*.
 - d) Enter the data for the new profit center *611##* in the profit center table.
 - e) Press ENTER.
 - f) Create another profit center and enter the data for the new profit center *612##* in the profit center table.
 - g) Press ENTER.
2. Which activation status do these profit centers currently have and what are the consequences?

- a) The profit centers are inactive. They can be neither assigned to nor posted to account assignment objects.
3. Activate the profit centers you created.
 - a) On the *Standard Hierarchy for Profit Centers Change* screen, choose *Edit* → *Activate*. The *Standard Hierarchy for Profit Centers Change* screen appears.
 - b) Select the checkbox next to profit centers 611## and 612## and choose the *OK* pushbutton.
 - c) Save the changes you made to the standard hierarchy.
4. On the *Company codes* tab page, check whether your profit centers are assigned to company code 1000.
 - a) On the *Standard Hierarchy for Profit Centers Change* screen, choose the *Company codes* tab page.
 - b) Make sure that the indicator is set for company code 1000 in the *Assigned* column.
5. Why does the test system have a dummy profit center?
 - a) EC-PCA is still active for testing purposes in the test system. All nonassigned postings in the P&L statement are posted to this profit center in EC-PCA. In new G/L, the profit center is inherited because of the document split for nonassigned document lines.

Task 2

You also need profit center groups for the information system.

1. Create the **GROUP##** profit center group with **Group ## Profit Centers** as description. Assign the following profit centers:

Profit Center Group	Assigned Profit Centers
GROUP## Group ## Profit Centers	611## pump division
	612## pump production

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *Profit Center* → *Profit Center Group* → *Create*.
- b) On *Create Profit Center Group: Initial Screen*, enter **GROUP##** in the *Profit Center Group* field.
- c) Press ENTER.
- d) On the *Create Profit Center Group: Structure* screen, enter **Group ## Profit Centers** as the description.
- e) Press ENTER.
- f) Click the top node, **GROUP##**, and choose *Edit* → *Profit Center* → *Insert Profit Center*.
- g) On the *Create Profit Center Group: Structure* screen, enter profit centers **611##** and **612##** on separate lines.
- h) Save the profit center group **GROUP##**.



LESSON SUMMARY

You should now be able to:

- Create a profit center standard hierarchy and master data



Assigning Profit Centers to SAP Objects

LESSON OVERVIEW

This lesson explains how to assign profit centers to account assignment objects in the SAP system to ensure that all the data is transferred.

Business Example

Your project team wants to understand how profit center account assignments are derived for various account assignment objects in SAP ERP. You need this information to prepare for the project meeting. For this reason, you require the following knowledge:

- An understanding of how to assign profit centers to different SAP objects



Explain the content from a business perspective using the technical settings in the system.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Assign profit centers to different SAP objects

Profit Center Assignments

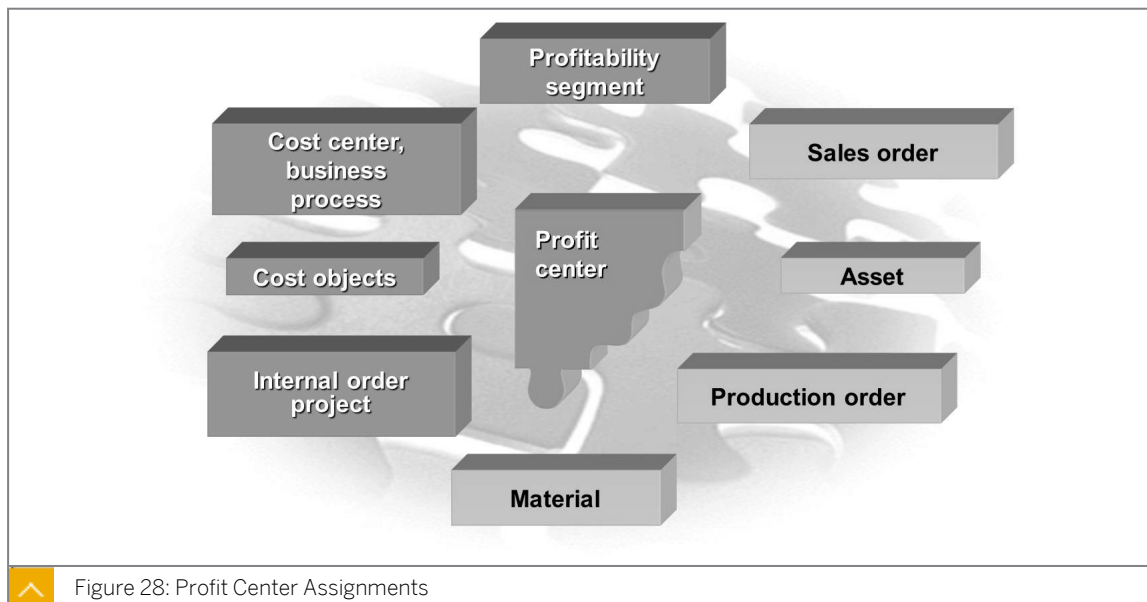


Figure 28: Profit Center Assignments

You assign profit centers to all account assignment objects to which costs and revenues have been posted. These assignments also determine the transfer of balance sheet items to the individual profit centers.

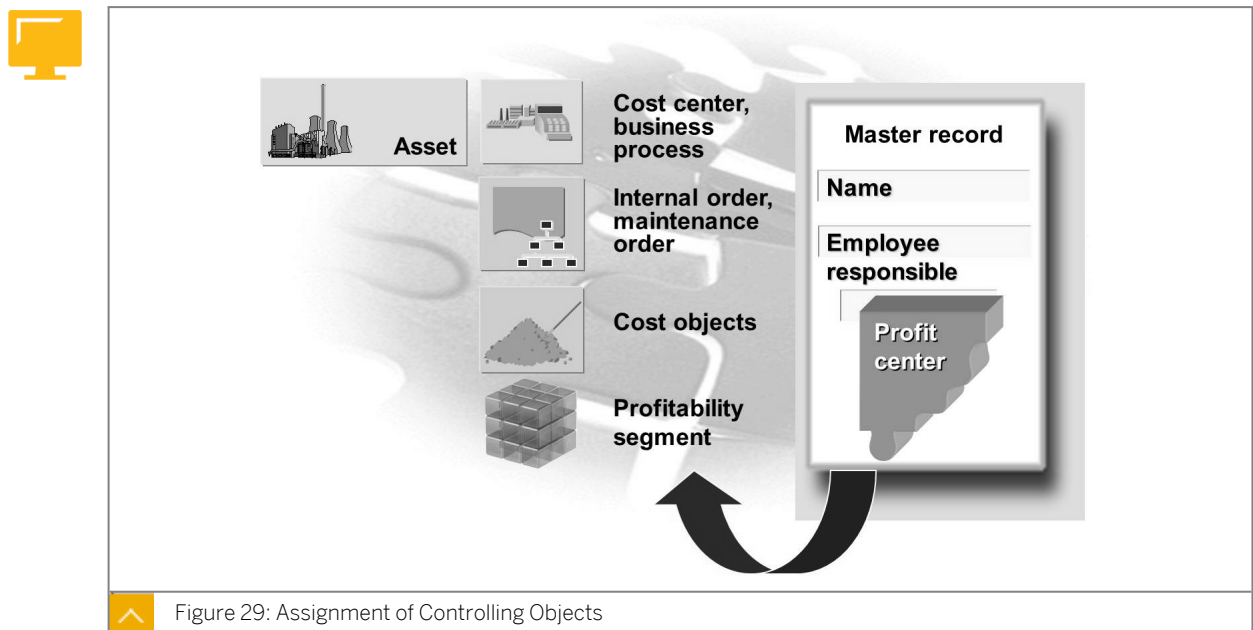
As a result of the assignment logic, the profit center is not posted explicitly. Instead, data is derived from primary account assignment objects (cost centers and internal orders).

Postings of costs and revenues to Profit Center Accounting (PCA) are based on the assignment of sales or production orders and cost objects. Overhead costs are based on the assignment of the account assignment objects in Overhead Cost Controlling (cost centers, internal orders, and so on) to profit centers.

You can maintain profit center assignments under the following menu paths:

- On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *Profit Center* → *Current Settings*.
- You assign account assignment objects to profit centers in *Customizing for Financial Accounting (New)*, under *General Ledger Accounting (New)* → *Master Data* → *Profit Center* → *Assignments of Account Assignment Objects to Profit Centers*.

Assignment of Controlling Objects



You can assign Overhead Cost Controlling (CO-OM) objects (cost centers, internal orders, projects, and business processes) to profit centers to observe the value flow between Financial Accounting and CO-OM from a profit center point of view.

When you assign a Controlling (CO) object to a profit center, the system makes sure that the CO area is the same for both the object and the profit center. Cost centers and business processes are assigned to a profit center on the *Master Record Basic Data* screen.

The validity period of the profit center must contain the dates of the cost center or business process. Additionally, the assignment of a cost center or internal order to a profit center also implicitly assigns all assets assigned to the cost center or internal order to the profit center.

You link the internal orders to a profit center on the *Order Master Data Assignments* screen. Maintenance orders from the Plant Maintenance component are assigned to a profit center in the same way as internal orders.

Cost objects are used in Product Cost Controlling to collect and store costs that cannot be assigned to objects at a lower level (orders, projects, or cost centers). However, in certain circumstances, you may need to assign a cost object to a profit center. The assignment logic used here is the same as that used for assigning cost centers.

Unlike other assignment objects, profitability segments do not have master records. A profitability segment is a combination of characteristics, such as a customer, product, plant, distribution channel, and so on. The profit center is always one of the characteristics.

Assignment of Projects

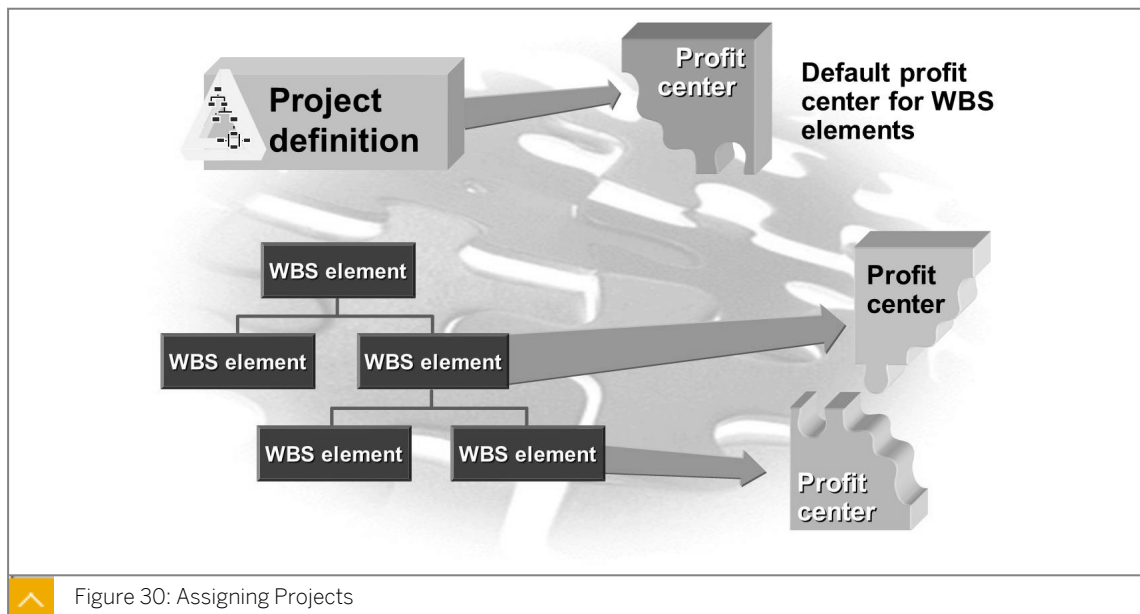


Figure 30: Assigning Projects

You can use projects to carry out complex and long-term tasks. This makes it possible for several profit centers to be involved in a single project, for example, constructing a ship. One profit center might be responsible for producing the engine, while another would be responsible for the internal fittings. Profit centers are therefore assigned to the various data-bearing structures in the project rather than the project definition itself.

Data-bearing structures:

- Work breakdown structure element (WBS element)
- Network header
- Network operation

In the project definition or the project profile, you can enter a profit center that you have to use as the default for the individual WBS elements. You can overwrite this value in the individual structures. If a WBS element is not assigned to a profit center, the system posts it to the dummy profit center.

If a network header is not assigned to a profit center, the profit center is derived from the corresponding WBS element.

If a network activity is not assigned to a profit center, the profit center is derived from the corresponding WBS element if the activity is linked to a WBS element. Otherwise, the profit center is taken from the network header.

The assignment of these structures to a profit center makes it possible for you to transfer work in process (WIP) from projects to PCA, as well as see all costs and revenues in the derived profit centers.

Assignment of Materials

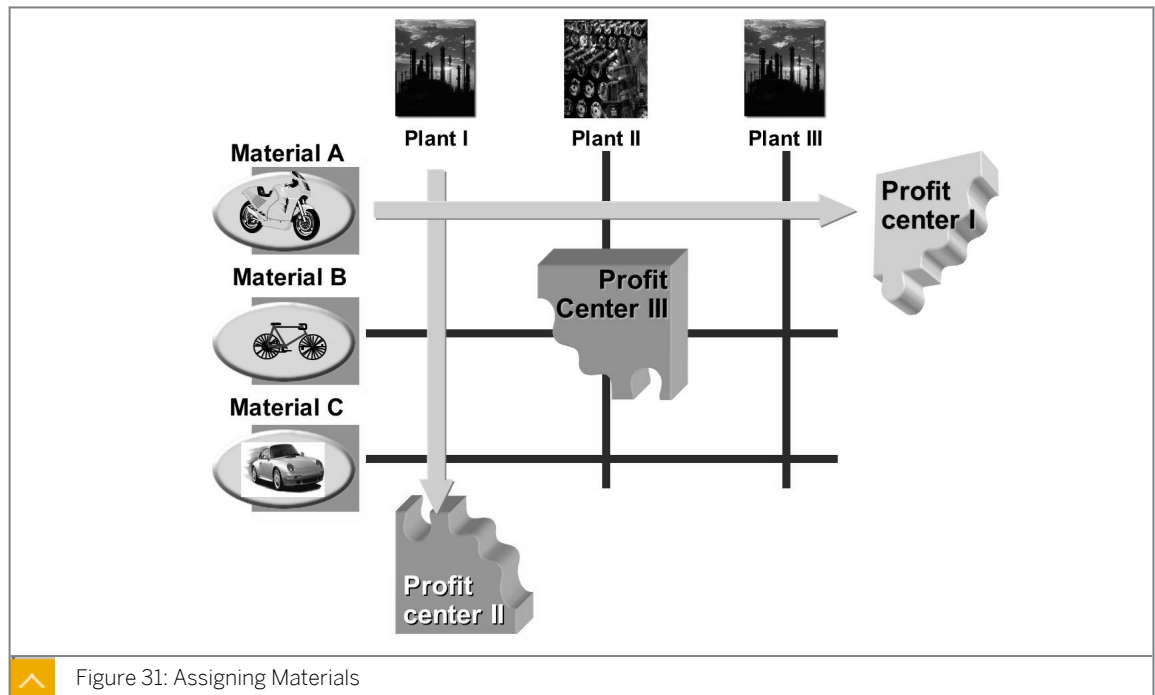


Figure 31: Assigning Materials

The assignment of the material masters to profit centers is the basis for the assignment of sales and production orders. Furthermore, it forms the foundation for internal goods movement transactions and the transfer of material stock to PCA.

Materials are always assigned to a profit center at plant level.

The example illustrates the following options this approach provides:

- A profit center that represents a material in all plants (Profit center I)
- A profit center that represents a plant, including all materials for the plant (Profit center II)
- A profit center that represents a specific material for a specific plant (Profit center III)

The plant is assigned to a company code, which is in turn assigned to a CO area. This CO area must be the same as the CO area to which the profit center belongs.

You can assign materials directly in the material master or use the fast assignment function.

Material maintenance is divided into several views. If you select the *Sales: General/Plant Data* view, you enter the profit center in *General plant parameters*. If the view is not relevant to this material (for example, with raw materials), you maintain the profit center in the *Storage 2* view, also in *General plant parameters*. However, the same profit center is always shown in different views.

Assignment of Production and Sales Orders

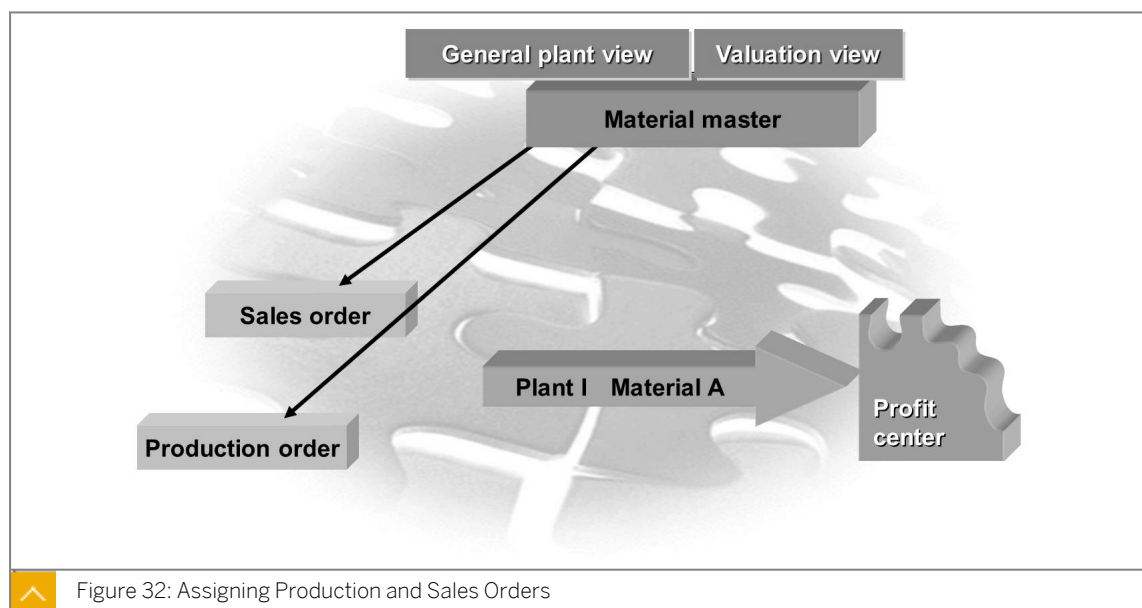


Figure 32: Assigning Production and Sales Orders

A production order contains an assignment to a profit center in the order master record. For Production Planning and Control (PP) production orders or process orders, you can find the *Profit Center* field under *Header Assignment*. For CO production orders, it is located on the initial screen.

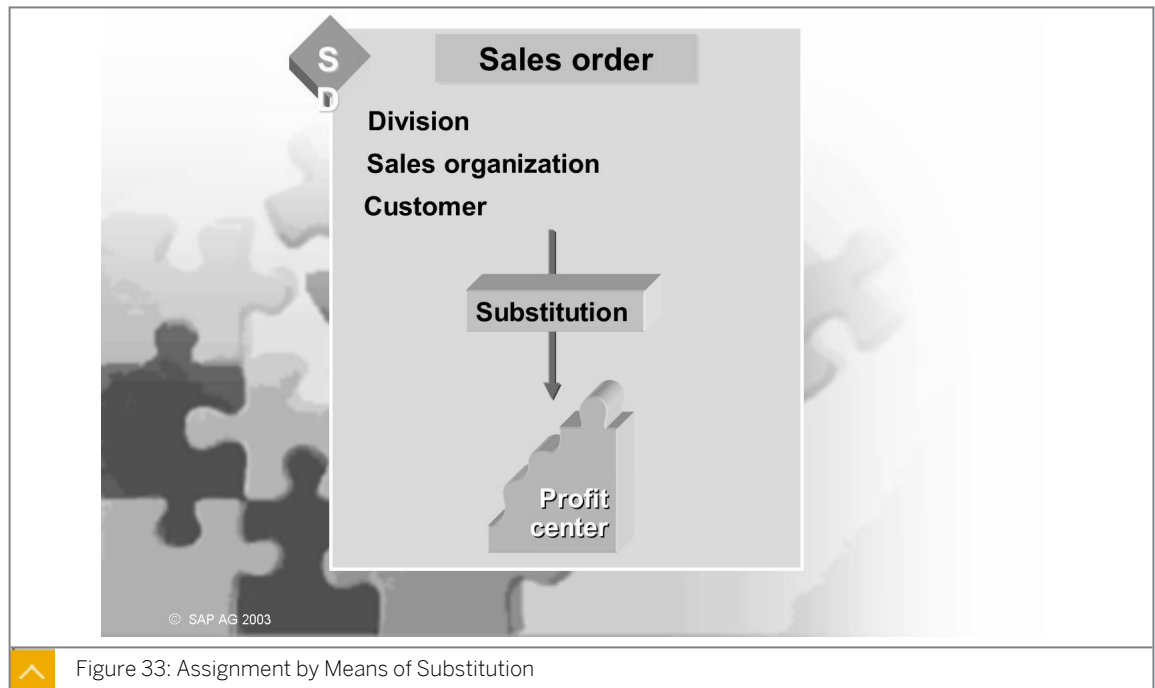
When you create a production order, the default profit center is taken from the master record (general plant parameters) of the material being produced. For process orders, the system proposes the profit center for the main product in the order. Therefore, you do not have to enter the profit center manually.

All the primary and secondary costs posted to the production order are passed on to the assigned profit center, along with the credit posted when the production order is delivered or settled. This assignment is also used to transfer WIP to PCA.

Production orders are carried out in a plant. Each plant is assigned to a company code, which in turn belongs to a CO area. This CO area and the CO area of the profit center must be the same.

Every order item in a sales order is assigned to a profit center. To find the *Profit Center* field, choose *Edit* → *Item* → *Account Assignment*. The profit center for the material to be sold is proposed by default. Therefore, you do not have to enter the profit center manually.

Assignment by Means of Substitution



In the sales order, the profit center from the material master for the item to be sold is proposed by default. This default proposal allows a product-oriented division by profit centers (through the material), a location-oriented division (through the plant), or a combination of both.

If you want to structure your company from a sales-oriented rather than a production-oriented view, you can also determine a profit center from the available fields in the *Sales Order* header or item with the help of substitution rules.

The following is a partial list of the fields from the sales order and related information that can be used to derive the profit center assignment:

- Business area
- Customer
- Customer group
- Customer groups 1–5
- Distribution channel
- Category
- Material
- Material group
- Material groups 1–5
- Material price group
- Order reason
- Plant

- Product hierarchy
- Sales district
- Sales group
- Sales office
- Sales organization
- Storage location

If the system finds a valid substitution for a sales order, it uses this instead of the default defined in the material master record.

Assignment Monitor – Overview



Because of the importance of the *profit center* characteristic in new General Ledger Accounting, the **Assignment Monitor for Profit Center was revised.**
The monitor displays lists for various SAP objects that could carry a profit center.
(Transaction code 1KE4)

The assignment overview became:

- much **clearer** and more intuitive, and
- **two SAP objects** (*Sales order item* and *Real estate objects [RE-FX]*) were added.

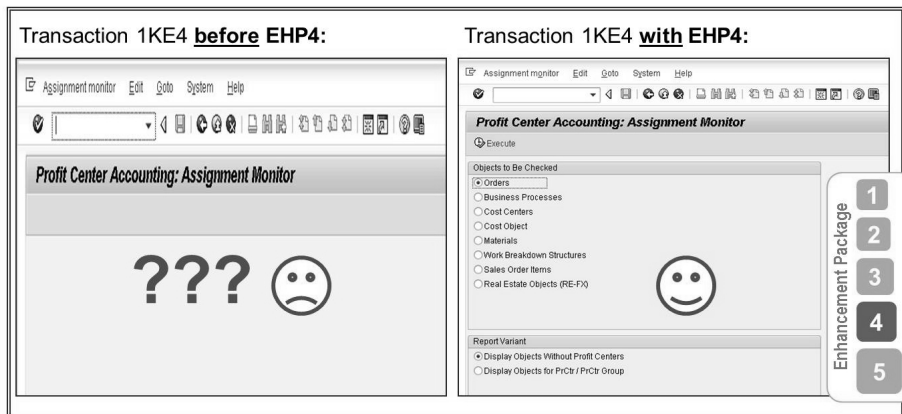


Figure 34: Assignment Monitor – Overview

To use the new functions of the assignment monitor, business function FIN_GL_CI_2 has to be active. This business function is available with EHP4.

You can display and check assignments under the following menu paths:

- On the SAP Easy Access screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *Profit Center* → *Current Settings* → *Assignment Overview*.
- You check assignments in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Master Data* → *Profit Center* → *Assignments of Account Assignment Objects to Profit Centers* → *Check Assignments*.

Assignments Check

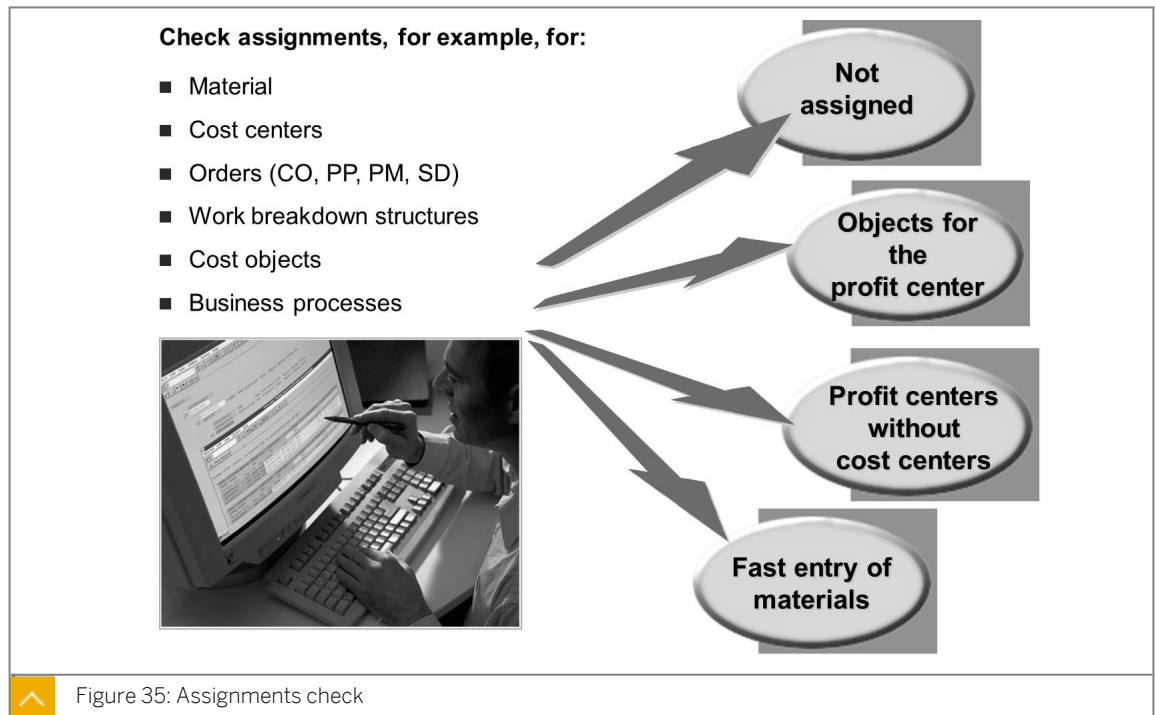


Figure 35: Assignments check

The assignment monitor provides an overview of all the assignments you have made to profit centers and provides support when you make or change assignments. For example, you can call up a list of all the cost centers that are not assigned to a profit center or profit center group, or a list of cost centers that are assigned to a particular profit center or profit center group. From here, you can move directly to the transaction for changing the object.

The fast entry screen in the *Material* menu enables you to assign several material numbers to a profit center quickly.

You can use the Orders menu to analyze the following types of orders:

- Internal orders (CO)
- Imputed cost orders (CO)
- CO production orders
- PP production orders
- Process orders
- Network headers
- Maintenance orders

The *Cost Objects* menu contains the general cost objects as well as the cost objects for process manufacturing.



Caution:

Incorrect assignments lead to incorrect transaction data in PCA, which is difficult to correct. You should therefore check your assignments carefully.



How to Assign a Profit Center to Controlling Objects

You assign the finished products, semifinished products, and raw materials of the pumps to the profit centers. You want to include both Asset Accounting (AA) and Cost Center Accounting in your calculations.

1. Create the following cost center in Cost Center Accounting from January 1 of the current fiscal year:

Field Name or Data Type	Value
Cost Center	T61100
Name	pump division
Description	pump division cost center
Responsible	andy admin
Cost Center Category	4
Hierarchy Area	H-AC612
Company Code	1000
Business Area	1000
Profit Center	61100

- a) On the SAP Easy Access screen, choose Accounting → Controlling → Cost Center Accounting → Master Data → Cost Center → Individual Processing → Create.
- b) On Create Cost Center: Initial Screen, enter the following data:

Field Name or Data Type	Value
Cost Center	T61100
Valid From	01.01.cur. FY
To	30.12.9999

- c) Press ENTER.
 - d) On Create Cost Center: Basic Screen, enter the data listed in the table.
 - e) Press ENTER.
 - f) Save the cost center.
2. Which profit center will the system determine if a posting is made to cost center T611##?
 - a) When you post to this cost center, the system determines profit center 611##.



How to Assign a Profit Center to Material Master Records

You want to use pump R-F1## as a test case in PCA. Production profit center 612## is to be used in the master record of this material.

1. Change the profit center assignment for *R-F1##* as specified in the table:

Field Name or Data Type	Value
<i>Material</i>	R-F100
<i>Profit Center</i>	61200

The profit center for the test case is valid only in plant **1000**.

- a) On the *SAP Easy Access* screen, choose *Logistics → Materials Management → Material Master → Material → Change → Immediately or Accounting → Financial Accounting → General Ledger → Master Records → Profit Center → Current Settings*.
- b) On *Change Material (Initial Screen)*, enter **R-F00** in the *Material* field and press ENTER.
- c) In the *Select View(s)* dialog box, choose the *General Plant Data /Storage 2* view or *Costing 1* view.
- d) Press ENTER.
- e) In the *Organizational Levels* dialog box, enter **1000** in the *Plant* field.
- f) On the *Change Material R-F100 (Finished product)* screen, enter **61200** in the *Profit Center* field.
- g) Press ENTER.
- h) In the *Last data screen reached* dialog box, choose the Yes pushbutton.



Analyze Profit Center Assignments

Business Example

You plan to use the pump division as a test case for product-oriented PCA.

Task 1

You assign the finished products, semifinished products, and raw materials of the pumps to the profit centers. You want to include both Asset Accounting and Cost Center Accounting in your calculations.

1. Create the following cost center in Cost Center Accounting from January 1 of the current fiscal year:

Field Name or Data Type	Value
<i>Cost Center</i>	T611##
<i>Name</i>	pump division
<i>Description</i>	pump division cost center
<i>Responsible</i>	andy admin
<i>Cost Center Category</i>	4
<i>Hierarchy Area</i>	H-AC612
<i>Company Code</i>	1000
<i>Business Area</i>	1000
<i>Profit Center</i>	611##

2. Which profit center will the system determine if a posting is made to cost center T611##?

Task 2

The company uses an asset to assemble the pumps in the production process. You want the value of this asset to be visible in PCA (in new General Ledger Accounting).

1. Create the asset for the pump assembly in AA with the following data:

Field Name or Data Type	Value
<i>Asset Class</i>	1200
<i>Company Code</i>	1000

On the *General* tab page, enter the description **Pump Assembly Group ##**. Then, on the *Time-dependent* tab page, enter the following data:

Field Name or Data Type	Value
<i>Business Area</i>	1000
<i>Cost Center</i>	T611##

Write down the order number: _____

- Which profit center will the system determine if a posting is made to the asset?

Task 3

You want to use pump **R-F1##** as a test case in PCA. Production profit center **612##** is to be used in the master record of this material.

- Change the profit center assignment for **R-F1##** as specified in the table:

Field Name or Data Type	Value
<i>Material</i>	R-F1##
<i>Profit Center</i>	612##

The profit center for the test case is valid only in plant **1000**.



Analyze Profit Center Assignments

Business Example

You plan to use the pump division as a test case for product-oriented PCA.

Task 1

You assign the finished products, semifinished products, and raw materials of the pumps to the profit centers. You want to include both Asset Accounting and Cost Center Accounting in your calculations.

1. Create the following cost center in Cost Center Accounting from January 1 of the current fiscal year:

Field Name or Data Type	Value
<i>Cost Center</i>	T611##
<i>Name</i>	pump division
<i>Description</i>	pump division cost center
<i>Responsible</i>	andy admin
<i>Cost Center Category</i>	4
<i>Hierarchy Area</i>	H-AC612
<i>Company Code</i>	1000
<i>Business Area</i>	1000
<i>Profit Center</i>	611##

- a) On the SAP Easy Access screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Master Data* → *Cost Center* → *Individual Processing* → *Create*.

- b) On *Create Cost Center: Initial Screen*, enter the following data:

Field Name or Data Type	Value
<i>Cost Center</i>	T611##
<i>Valid From</i>	01.01.cur. FY
<i>To</i>	30.12.9999

- c) Press ENTER.
- d) On *Create Cost Center: Basic Screen*, enter the data listed in the table.
- e) Press ENTER.

- f) Save the cost center.
2. Which profit center will the system determine if a posting is made to cost center *T611##*?
- a) When you post to this cost center, the system determines profit center *611##*.

Task 2

The company uses an asset to assemble the pumps in the production process. You want the value of this asset to be visible in PCA (in new General Ledger Accounting).

1. Create the asset for the pump assembly in AA with the following data:

Field Name or Data Type	Value
<i>Asset Class</i>	1200
<i>Company Code</i>	1000

On the *General* tab page, enter the description **Pump Assembly Group ##**. Then, on the *Time-dependent* tab page, enter the following data:

Field Name or Data Type	Value
<i>Business Area</i>	1000
<i>Cost Center</i>	T611##

Write down the order number: _____

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Fixed Assets* → *Asset* → *Create* → *Asset*.
- b) On *Create Asset: Initial Screen*, enter the data listed in the table.
- c) Press ENTER.
- d) On the *General* tab page, enter **Pump Assembly Group ##** in the *Description* field.
- e) On the *Time-dependent* tab page, enter the given data.
- f) Press ENTER.
- g) Save the asset.
2. Which profit center will the system determine if a posting is made to the asset?
- a) Cost center *T611##* is assigned to the asset in the asset master record. Profit center *611##* is entered in the master record for this cost center. The system determines this profit center.

Task 3

You want to use pump **R-F1##** as a test case in PCA. Production profit center **612##** is to be used in the master record of this material.

1. Change the profit center assignment for **R-F1##** as specified in the table:

Field Name or Data Type	Value
<i>Material</i>	R-F1##
<i>Profit Center</i>	612##

The profit center for the test case is valid only in plant **1000**.

- a) On the *SAP Easy Access* screen, choose *Logistics → Materials Management → Material Master → Material → Change → Immediately or Accounting → Financial Accounting → General Ledger → Master Records → Profit Center → Current Settings*.
- b) On *Change Material Initial Screen*, enter **R-F##** in the *Material* field and press ENTER.
- c) In the *Select View(s)* dialog box, choose the *General Plant Data /Storage 2 view* or *Costing 1 view*.
- d) Press ENTER.
- e) In the *Organizational Levels* dialog box, enter **1000** in the *Plant* field.
- f) On the *Change Material R-F101 (Finished product)* screen, enter **612##** in the *Profit Center* field.
- g) Press ENTER.
- h) In the *Last data screen reached* dialog box, choose the *Yes* pushbutton.



LESSON SUMMARY

You should now be able to:

- Assign profit centers to different SAP objects



Learning Assessment

1. Based on which of the following aspects can you divide your enterprise?

Choose the correct answers.

- A The geographical structure of profit centers
- B The product-related structure of profit centers
- C The business unit profit center planning
- D The functional structure of profit centers

2. Profit center master data is time independent, which means you can create different data for different periods.

Determine whether this statement is true or false.

- True
- False

3. You can assign profit centers to all account assignment objects to which you have posted the _____.

Choose the correct answer.

- A production orders
- B cost objects
- C costs and revenues
- D sales orders

4. The profit center can be assigned to the sales order item in which of the following ways?

Choose the correct answers.

- A The profit center for the material is set automatically.
- B The profit center can be entered manually.
- C The profit center can be set with a substitution.
- D The profit center is taken from the customer master record.



Learning Assessment - Answers

1. Based on which of the following aspects can you divide your enterprise?

Choose the correct answers.

- A The geographical structure of profit centers
- B The product-related structure of profit centers
- C The business unit profit center planning
- D The functional structure of profit centers

2. Profit center master data is time independent, which means you can create different data for different periods.

Determine whether this statement is true or false.

- True
- False

3. You can assign profit centers to all account assignment objects to which you have posted the _____.

Choose the correct answer.

- A production orders
- B cost objects
- C costs and revenues
- D sales orders

4. The profit center can be assigned to the sales order item in which of the following ways?

Choose the correct answers.

- A The profit center for the material is set automatically.
- B The profit center can be entered manually.
- C The profit center can be set with a substitution.
- D The profit center is taken from the customer master record.

UNIT 3

Actual Postings for Profit Center Accounting

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UNIT OBJECTIVES

- Analyze profit center updates
- Outline the integration of profit centers and Asset Accounting
- Explain the integration with Materials Management
- Draft the integration of Cost Object Controlling and Profit Center Accounting
- Outline the integration of Sales and Distribution and Profit Center Accounting

- Define and execute a profit center allocation



Explaining Profit Center Updates

LESSON OVERVIEW

This lesson provides a basic overview of profit center updates in new General Ledger Accounting (new G/L).

Business Example

You want to understand the basics of profit center updates to prepare yourself for analyzing and setting up the integrative processes. For this reason, you require the following knowledge:

- An understanding of how to analyze profit center updates



Explain the content from a business perspective using the technical settings in the system.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Analyze profit center updates

Profit Center Updates

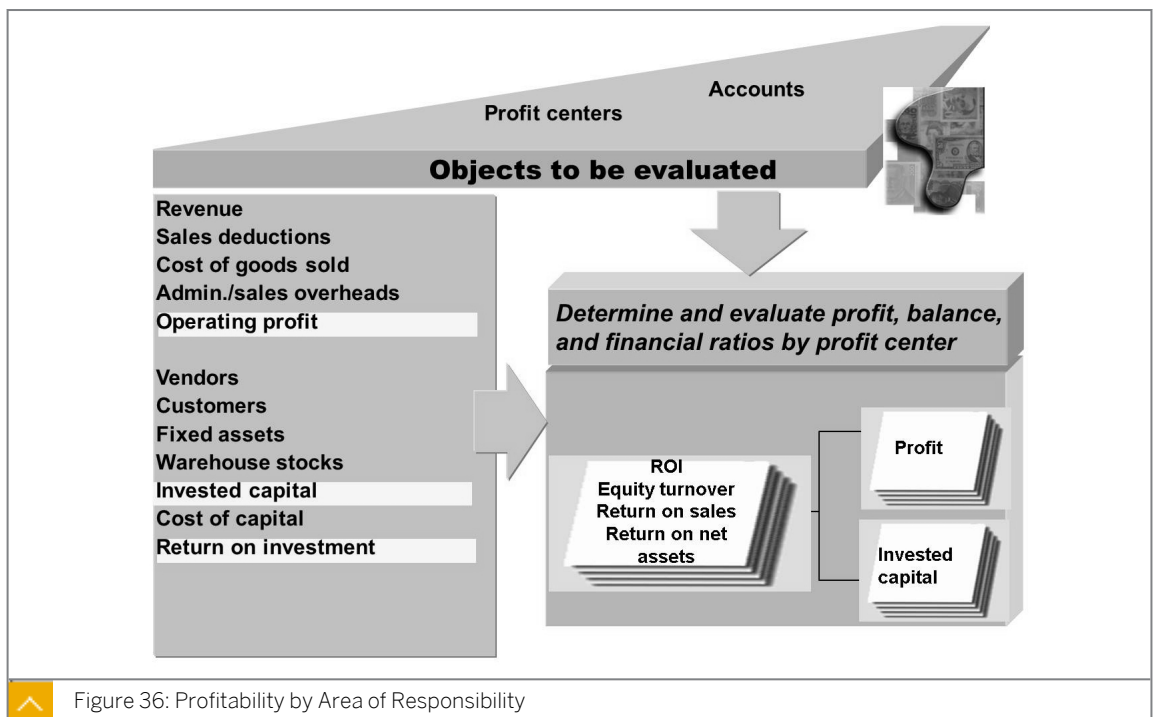


Figure 36: Profitability by Area of Responsibility

You select the *Profit Center Update* scenario to model Profit Center Accounting (PCA) in new G/L. Dividing a company into profit centers enables you to delegate entrepreneurial

responsibility to these decentralized organizational units and steer and control them. You can say that a profit center is a company within a company. The profit center differs from a cost center because cost centers merely represent the units in which capacity costs arise, whereas the person in charge of the profit center is responsible for its balance of costs and revenues.

PCA enables you to calculate the internal operating result for a profit center according to period accounting and/or cost-of-sales accounting. You can also create a financial statement and report financial indicators (such as return on investment, cash flow, and sales per employee) for profit centers. In this case, you enhance the profit center to become an investment center.

Advantages of Using Profit Accounting in New General Ledger Accounting

The benefits of using profit accounting in new G/L are as follows:

- You can use document splitting to identify payables and receivables according to their origin at profit center level. If required, you can also create financial statements at profit center level.
- No reconciliation is required between the general ledger and PCA.

Data from feeder applications (such as logistics) already contains the assignment of the object (such as a material or sales order) to a profit center or partner profit center. In some business transactions, the profit center or the partner profit center is determined through document splitting for selected document items (such as receivables or payables).

If you want to identify receivables and payables according to their origin at profit center level, you have to use document splitting. If you want to use the segment reporting scenario with the segment characteristic, you also have to activate the profit center update scenario. You can use period accounting and/or cost-of-sales accounting in PCA.

If you want to use cost-of-sales accounting, you have to activate the cost-of-sales accounting scenario and configure the corresponding settings. This also makes it possible for you to analyze a number of financial indicators for profit centers, including return on investment, working capital, and cash flow. This means that PCA can be used by companies in any industry sector (for example, mechanical engineering, chemicals, or service industries) and with any form of production (for example, repetitive manufacturing, make-to-order manufacturing, or process manufacturing).

Organizational Units and Master Data

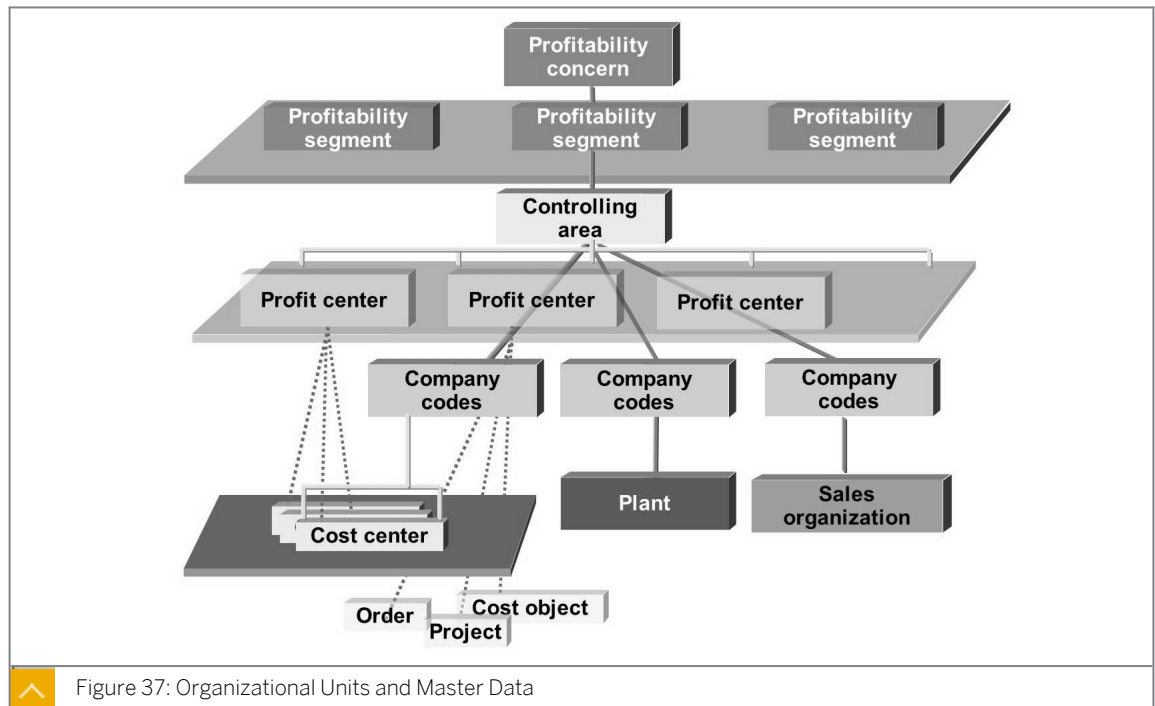


Figure 37: Organizational Units and Master Data

The assignments of all profit-relevant objects to profit centers play an important role. The assignments determine how your business is divided into areas of responsibility. You make these assignments in the master data of the original objects (materials, cost centers, orders, projects, sales orders, assets, cost objects, and profitability segments). Every profit center is assigned to the Controlling (CO) area organizational unit. All profit centers of a CO area are assigned to a profit center standard hierarchy that reflects the organizational structure in PCA at your company.

When you make manual general ledger account postings in the general ledger, you can specify the profit center or the partner profit center. For primary cost elements, the profit center or the partner profit center is derived automatically from the cost-relevant account assignment. You cannot enter the profit center manually for receivables, payables, or automatically generated line items. If you use document splitting, the system can supply these items with a profit center.

If an allocation in CO results in a change of characteristics relevant for the general ledger (such as a profit center or a functional area), it also leads to change of the affected items in the profit and loss statement. Therefore, the system has to forward this information to Financial Accounting (FI). Real-time integration of CO with FI enables the immediate transfer of all CO documents to FI, together with the detailed information required for the general ledger. As a result, FI and CO are always reconciled.

Profit Center Accounting in Controlling or in New General Ledger Accounting

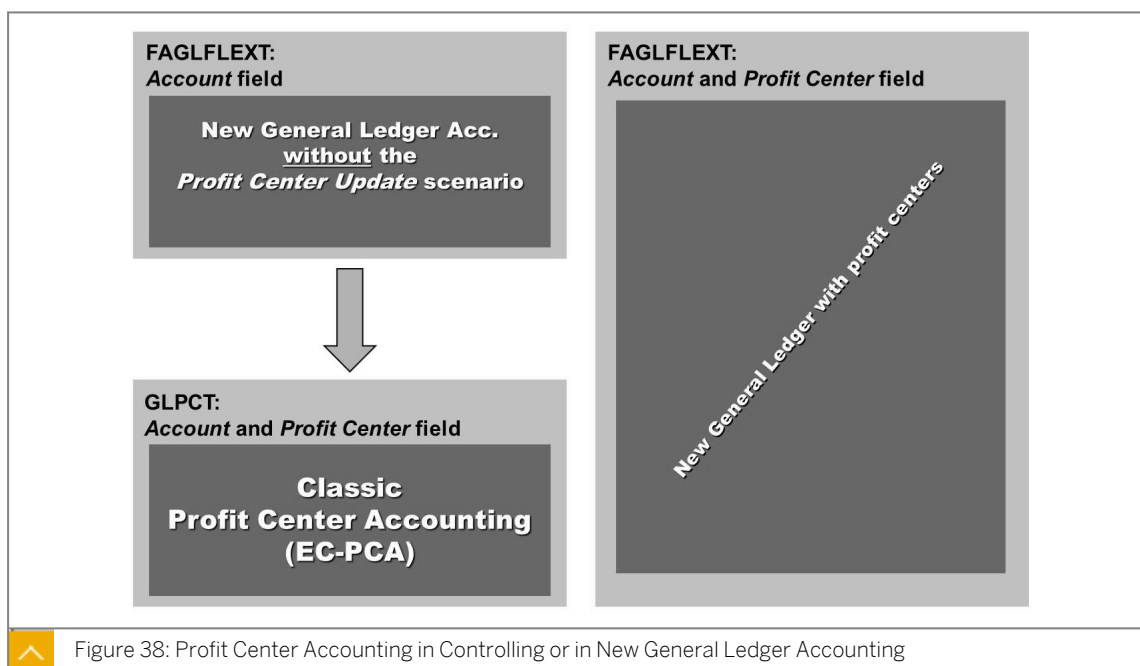


Figure 38: Profit Center Accounting in Controlling or in New General Ledger Accounting

You want to integrate PCA in new G/L to create financial statements at the profit center level. You have already used classic Profit Center Accounting (EC-PCA) mainly to report profit center balance sheets (and not because of CO-based issues). Therefore, you activate the *Profit Center Update* scenario (FIN_PCA) in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Ledgers* → *Ledger* → *Assign Scenarios and Customer Fields to Ledgers*.

We do not recommend that you use EC-PCA in parallel with the *Profit Center Update* scenario because this would increase the data volume unnecessarily.

If you have already used EC-PCA in the past and now want to use PCA in new G/L, you can (after migration to new G/L – see www.service.sap.com/glmig) use the two in parallel for a transition period. SAP does not recommend this in the long term because of the increased data volume and additional reconciliation effort required.

For more information, see SAP Note 826357.



How to Post to Profit Centers in General Ledger Accounting

1. Create an FI in General Ledger Accounting (in company code 1000 and the current year or actual date).
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Document Entry* → *Enter G/L Account Document (FB50)*.
 - b) On the *Enter G/L Account Document: Company Code AA00* screen, enter today's date in the *Document Date* field and then enter the following data:

G/L acct	D/C	Amount in doc.curr.	Profit Center
1131##	Debit	100000	1200

G/L acct	D/C	Amount in doc.curr.	Profit Center
1131##	Debit	200000	1300
1132##	Credit	100000	1200
1132##	Credit	200000	1300

- c) Choose the *Simulate* pushbutton.
 - d) Post your document.
 - e) Return to the *SAP Easy Access* screen.
2. Display the balances in General Ledger Accounting for account 1131##, company code 1000, ledger OL, and the current fiscal year and drilldown to the FI document.
- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Account* → *Display Balances (New)* (FAGLB03).
 - b) On the *G/L Account Balance Display* screen, enter the above-mentioned data and choose the *Execute* pushbutton.
 - c) On the *Balance Display: G/L Accounts For the Ledger OL* screen, choose the *Display More Chars* pushbutton.
 - d) Choose the *Change* pushbutton in the *Profit Center* line. In the *Selection Values* dialog box, double-click profit center 1300.
 - e) On the *Balance Display: G/L Accounts For the Ledger OL* screen, double-click the amount in the *Credit* column.
 - f) On the *G/L Account Line Item Display G/L View* screen, select the checkbox next to the line item and choose the *Display Document* pushbutton.
 - g) On the *Display Document: Line Item XXX* screen, choose the *Call Up Document Overview* pushbutton.
 - h) On the *Display Document: Data Entry View* screen, choose the *General Ledger View* pushbutton.
 - i) On the *Display Document: General Ledger View* screen, choose the *Choose Layout* pushbutton. In the *Choose layout* dialog box, choose the layout /AC 1.
 - j) Highlight the *Profit Center* column of the document and choose the *Subtotal* pushbutton. After analyzing, return to the *SAP Easy Access* screen.



LESSON SUMMARY

You should now be able to:

- Analyze profit center updates



Demonstrating the Integration of Profit Centers and Asset Accounting

LESSON OVERVIEW

This lesson explains how to modify asset movements in Profit Center Accounting (PCA).

Business Example

You want to model asset balances and their changes in the profit center financial statements as well as depreciation in the profit center profit and loss (P&L) statement. For this reason, you require the following knowledge:

- An understanding of how to transfer and analyze asset movements to PCA



Explain the relationship from a business perspective using the technical settings in the system.



Hint:

Show the participants the depreciation items in the profit center financial statements. After the exercise is complete, start the depreciation run in profit center *1000*. Then use *GROUP##* to show what the value adjustments look like in the profit center financial statements. You can use one of the participant's profit center groups to show that the depreciation run took place for all the assets in company code *1000*.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Outline the integration of profit centers and Asset Accounting

Profit Centers and Asset Accounting

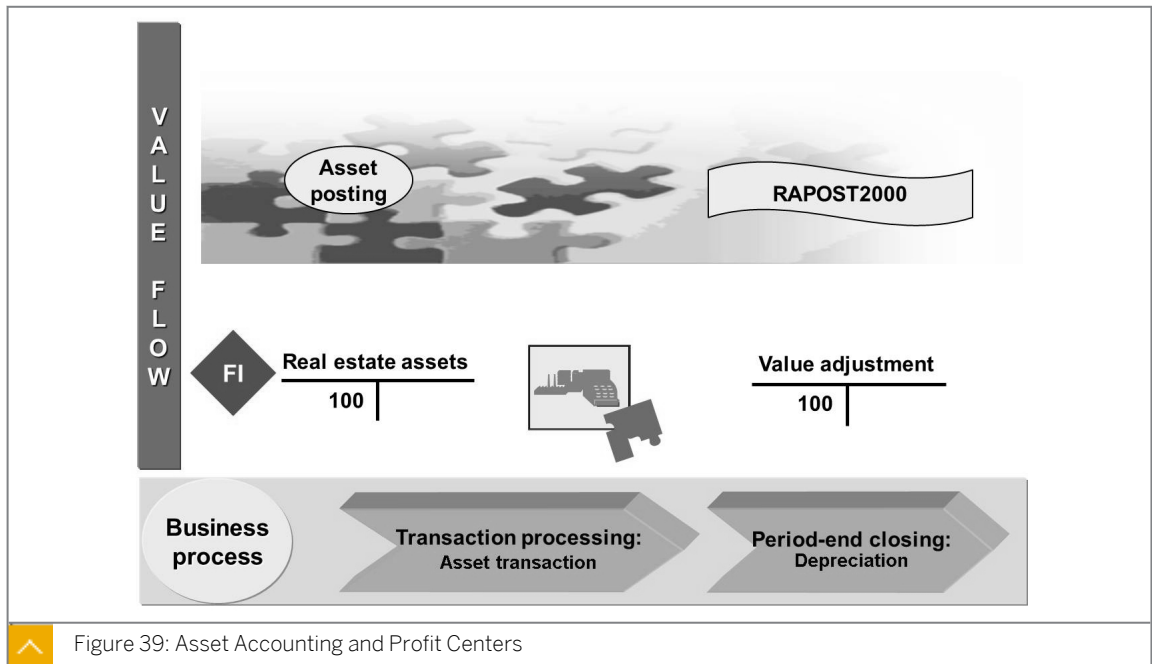


Figure 39: Asset Accounting and Profit Centers

The segment and profit center cannot be defined directly in the asset master record. The system derives these two objects from a cost center or an order, based on the information that is saved in the asset master data. You define account assignment types in *Customizing for Financial Accounting (New)* under *Asset Accounting → Integration with the General Ledger → Additional Account Assignment Objects → Specify Account Assignment Types for Account Assignment Objects*. You can only maintain the account assignment types for activated account assignment objects. The value flows of any asset transactions posted in FI flows to profit centers through the cost object stored in the asset master record.

Asset Movements and Profit Centers



Objective / option: Supply asset movements with segments (or profit centers):

- To **pass characteristics** (such as *segment* and *profit center*) **from the asset line item to the vendor and tax line item**, or for a non-integrated receipt in the clearing account line item, **the document splitting logic is used in new General Ledger.**

Solution: Activate/use **document splitting**

Result of posting an integrated asset receipt (TCode F-90):

General Ledger view / Ledger

CCd ⁺	P	PK	Account	Name	∑ Amount	Cur.	B	CCtr	PC	Segment
1000	1	31	160000	Vendor Payable	110,000.00-	EUR	VN		1000	SEGA
	2	70	11000	000020020000	100,000.00	EUR	VN		1000	SEGA
	3	40	154000	Input tax	10,000.00	EUR	VN		1000	SEGA
					0.00	EUR				

Layout with totals formation in the *amount* column

Figure 40: Asset Movements and Profit Centers

Document splitting also works for acquisition postings with multiple assets (and different account assignments). The asset reconciliation accounts (balance sheet and value adjustment accounts) are already classified internally as asset item categories. You can use the new FI drilldown reports to create financial statements for a segment or profit center immediately (transaction code FGI0).

Posting Depreciation to Profit Centers



Log for Posting Run

Posting Date: 07/31/YYYY Creation Date: 08/02/YYYY Period: YYYY/007/01

the *Profit Center* and the *Segment* entity?

Asset	AccDet	BsAr	CCTR	Order	Doc. no.	Descrip.	Plan.	Am. Post.	Am. TBP
20000	9900				400000010	Ord. depr.	1,200	600-	100-
30000	3000						4,800-	2,400-	400-
Ord. depr.							6,000-	3,000-	500-
Depreciation area 01									
20000	9900		T-F05A00		400000011	Ord. depr.	600	300	50
30000	3000		T-F05E00				4,800-	2,400-	400
Ord. depr.							5,400	2,700	450
20000	9900		T-F05A00		400000011	Interest	120	60	10
30000	3000		T-F05E00				240	20	20
Interest							360	180	30
Valuation Area 20							5,040	2,520	420

2 documents were created

To successfully execute the depreciation program when new G/L and document splitting and segment reporting for FI-AA are active, the settings shown in the following figure are required ...

Figure 41: Program RAPOST2000

Program RAPOST2000 posts depreciation for Asset Accounting in SAP R/3, Release 4.7, and onwards.

Another interesting question is whether and how FI characteristics, such as the profit center (and the segment) are passed on in the depreciation posting documents.

Settings for the Depreciation Posting Run (and Activated Segment Reporting in FI-AA)



Business embedding: If **asset transactions** are to be provided with FI characteristics for the purposes of a "**characteristic balance sheet**", this must **also** be the case for FI-AA depreciation documents!

To derive entities while executing program RAPOST2000, the **correct account assignment type** has to be specified:
 -> **Depreciation area 01:** For example for the *Profit Center* and the *Segment* account assignment object
 -> **Depreciation area 20:** In addition, also for account assignment objects of Controlling

Company code: AA00
Depreciation area: 01 (Book Depreciation) and **20** (Cost-Accounting Depreciation)

Account assignment objects					
AA Object	Name of AA Object	TTy	TTy Text	Acct. Assg. Ty.	Assign
KOSTL	Cost center	*	Gen. Trn. Ty.	Dep. Run	<input checked="" type="checkbox"/>
CAUFN	Internal order	*	Gen. Trn. Ty.	Dep. Run	<input checked="" type="checkbox"/>
PS_PSP.	WBS element	*	Gen. Trn. Ty.	Dep. Run	<input checked="" type="checkbox"/>
PRCTR	Profit Center	*	Gen. Trn. Ty.	Dep. Run	<input checked="" type="checkbox"/>
SEGMENT	Segment	*	Gen. Trn. Ty.	Dep. Run	<input checked="" type="checkbox"/>

Enhancement Package

- 1
- 2
- 3
- 4
- 5

Area 20

Area 01

Figure 42: Settings for the Depreciation Posting Run

The different types of account assignments are as follows:

- Depreciation area 20 must have the *Depreciation Run* account assignment type if area 20 is the area for posting the cost-accounting values (depreciation or interest) to Controlling.

In this case, the (cost-accounting) depreciation account is defined as a cost element, and requires a CO-relevant account assignment object, when posting depreciation. However, this account assignment object (such as cost center, order, or WBS element) can only be posted to if the *Depreciation Run* account assignment type is specified for those CO entities.

Hint:
 These settings for program RAPOST2000 are mandatory no matter if new General Ledger Accounting or any business function is active or not.

Caution:
 If segment reporting for FI-AA is activated (possible with active business function FIN_GL_REORG_1), in addition the particular FI characteristics account assignment objects (profit center and segment) need to be defined.

- Depreciation area 01 records book depreciation.

Without activated segment reporting in FI-AA, the system requires the *Depreciation Run* account assignment type for account assignment objects of Controlling even if the depreciation expense account is not defined as a cost element, which means these values are only posted in FI. This is the only way for the system to derive the profit center and then (possibly) the segment from the CO object for the book depreciation document.

With activated segment reporting in FI-AA, the system does not require the *Depreciation Run* account assignment type for account assignment objects of Controlling. But you still have to define the *Depreciation Run* account assignment type explicit for the *Profit Center* and the *Segment* account assignment objects.

The important Customizing settings are as follows:

- Activate segment reporting in *Customizing for Financial Accounting (New)* under *Asset Accounting* → *Integration with General Ledger Accounting* → *Segment Reporting* → *Activate Segment Reporting*.
- Specify account assignment types for account assignment objects in *Customizing for Financial Accounting (New)* under *Asset Accounting* → *Integration with General Ledger Accounting* → *Additional Account Assignment Objects* → *Specify Account Assignment Types for Account Assignment Objects*.



How to Transfer Asset Transactions to Profit Center Accounting

You want to transfer balance sheet account postings for assets to PCA. The consumables costs for assembly in the group's entire pump division are posted to a cost center. Enter this invoice as a debit for the T611## pump cost center.

1. Post the acquisition of the asset in company code 1000 in AA under FI by executing the acquisition posting with an automatic offsetting entry. Use the following data:

Field Name or Data Type	Value
<i>Existing Asset</i>	Pump ##
<i>Amount Posted</i>	100000
<i>Document Date</i>	Current date
<i>Posting Date</i>	Current date

Save the document.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Fixed Assets* → *Posting* → *Acquisition* → *External Acquisition* → *Acquis. w/Autom. Offsetting Entry*.
 - b) On the *Enter Asset Transaction: Acquis. w/Autom. Offsetting Entry* screen, enter the data listed in the table.
 - c) Press ENTER.
 - d) Save your document.
2. Analyze the transferred data in a standard profit center report in FI called *Profit Center Group: Plan/Actual/Variance* (delivered with EHP3). Start the report and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L

Field Name or Data Type	Value
Controlling Area	1000
FIS Annual Rep.Struc	INT
Plan Version	0
Fiscal Year	Current fiscal year
From Period	1
To Period	12
Profit Center Group	GROUP##

What do you notice?

- a) On the SAP Easy Access screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Press ENTER.
- d) Choose the *Execute* pushbutton.
The asset acquisition appears in the financial statements.

3. Enter an incoming invoice in FI (transaction code FB60) with the following data:

Field Name or Data Type	Value
Vendor	T-K500A##
Invoice date	Current date
Amount	2200
Tax amount	200
Tax Code	1I
G/L Account	403000
D/C	Debit
Amount in Doc. Curr.	2000
Cost Center	T611##

Save the document.

- a) On the SAP Easy Access screen, choose *Accounting* → *Financial Accounting* → *Accounts Payable* → *Document Entry* → *Invoice (FB60)*.
- b) On the *Enter Vendor Invoice: Company Code 1000* screen, enter the data listed in the table.
- c) Press ENTER.
- d) Save your invoice.

4. Analyze the document in the financial statements and P&L statement of profit center 611##. To do so, use the *Profit Center Group: Plan/Actual/Variance* report with the following parameters:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group</i>	GROUP##

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Press ENTER.
- d) Choose the *Execute* pushbutton.
The expense and payables are posted to profit center 611##.

Unit 3

Exercise 4



73

Post Asset Transactions to Profit Center Accounting



After completing this exercise, you can post depreciation (transaction code `AFAB`) with the following parameters:

- Company code: 1000
- Period: Current

If the course does not take place in January, choose the *Unplanned* option.

Business Example

You want to model asset balances and their changes in the profit center financial statements, as well as depreciation in the profit center P&L statement.

Task 1

Transfer balance sheet account postings for assets to PCA.

1. Post the acquisition of the asset in company code 1000 in AA under FI by executing the acquisition posting with an automatic offsetting entry. Use the following data:

Field Name or Data Type	Value
<i>Existing Asset</i>	Pump ##
<i>Amount Posted</i>	100000
<i>Document Date</i>	Current date
<i>Posting Date</i>	Current date

Save the document.

2. Analyze the transferred data in a standard profit center report in FI called *Profit Center Group: Plan/Actual/Variance* (delivered with EHP3). Start the report and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT

Field Name or Data Type	Value
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group</i>	GROUP##

What do you notice?

Task 2

The consumables costs for assembly in the group's entire pump division are posted to a cost center. Enter this invoice as a debit for the T611## pump cost center.

1. Enter an incoming invoice in FI (transaction code FB60) with the following data:

Field Name or Data Type	Value
<i>Vendor</i>	T-K500A##
<i>Invoice date</i>	Current date
<i>Amount</i>	2200
<i>Tax amount</i>	200
<i>Tax Code</i>	1I
<i>G/L Account</i>	403000
<i>D/C</i>	Debit
<i>Amount in Doc. Curr.</i>	2000
<i>Cost Center</i>	T611##

Save the document.

2. Analyze the document in the financial statements and P&L statement of profit center 611##. To do so, use the *Profit Center Group: Plan/Actual/Variance* report with the following parameters:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0

Field Name or Data Type	Value
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group</i>	GROUP##



Post Asset Transactions to Profit Center Accounting



After completing this exercise, you can post depreciation (transaction code `AFAB`) with the following parameters:

- Company code: 1000
- Period: Current

If the course does not take place in January, choose the *Unplanned* option.

Business Example

You want to model asset balances and their changes in the profit center financial statements, as well as depreciation in the profit center P&L statement.

Task 1

Transfer balance sheet account postings for assets to PCA.

1. Post the acquisition of the asset in company code 1000 in AA under FI by executing the acquisition posting with an automatic offsetting entry. Use the following data:

Field Name or Data Type	Value
<i>Existing Asset</i>	Pump ##
<i>Amount Posted</i>	100000
<i>Document Date</i>	Current date
<i>Posting Date</i>	Current date

Save the document.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Fixed Assets* → *Posting* → *Acquisition* → *External Acquisition* → *Acquis. w/Autom. Offsetting Entry*.
 - b) On the *Enter Asset Transaction: Acquis. w/Autom. Offsetting Entry* screen, enter the data listed in the table.
 - c) Press ENTER.
 - d) Save your document.
2. Analyze the transferred data in a standard profit center report in FI called *Profit Center Group: Plan/Actual/Variance* (delivered with EHP3). Start the report and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group</i>	GROUP##

What do you notice?

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Press ENTER.
- d) Choose the *Execute* pushbutton.
The asset acquisition appears in the financial statements.

Task 2

The consumables costs for assembly in the group's entire pump division are posted to a cost center. Enter this invoice as a debit for the *T611##* pump cost center.

1. Enter an incoming invoice in FI (transaction code *FB60*) with the following data:

Field Name or Data Type	Value
<i>Vendor</i>	T-K500A##
<i>Invoice date</i>	Current date
<i>Amount</i>	2200
<i>Tax amount</i>	200
<i>Tax Code</i>	1I
<i>G/L Account</i>	403000
<i>D/C</i>	<i>Debit</i>
<i>Amount in Doc. Curr.</i>	2000

Field Name or Data Type	Value
Cost Center	T611##

Save the document.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Accounts Payable* → *Document Entry* → *Invoice* (FB60).
- b) On the *Enter Vendor Invoice: Company Code 1000* screen, enter the data listed in the table.
- c) Press ENTER.
- d) Save your invoice.

2. Analyze the document in the financial statements and P&L statement of profit center 611##. To do so, use the *Profit Center Group: Plan/Actual/Variance* report with the following parameters:

Field Name or Data Type	Value
Currency Type	10
Company Code	1000
Ledger	0L
Controlling Area	1000
FIS Annual Rep.Struc	INT
Plan Version	0
Fiscal Year	Current fiscal year
From Period	1
To Period	12
Profit Center Group	GROUP##

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Press ENTER.
- d) Choose the *Execute* pushbutton.
The expense and payables are posted to profit center 611##.



LESSON SUMMARY

You should now be able to:

- Outline the integration of profit centers and Asset Accounting



Outlining the Integration of Profit Centers with Materials Management

LESSON OVERVIEW

This lesson explains how to transfer postings from Materials Management to Profit Center Accounting (PCA).

Business Example

You want to outline the effects of Materials Management or logistics-related processes on PCA. For this reason, you require the following knowledge:

- An understanding of integration with Materials Management



Explain the content from a business perspective using the technical settings in the system.

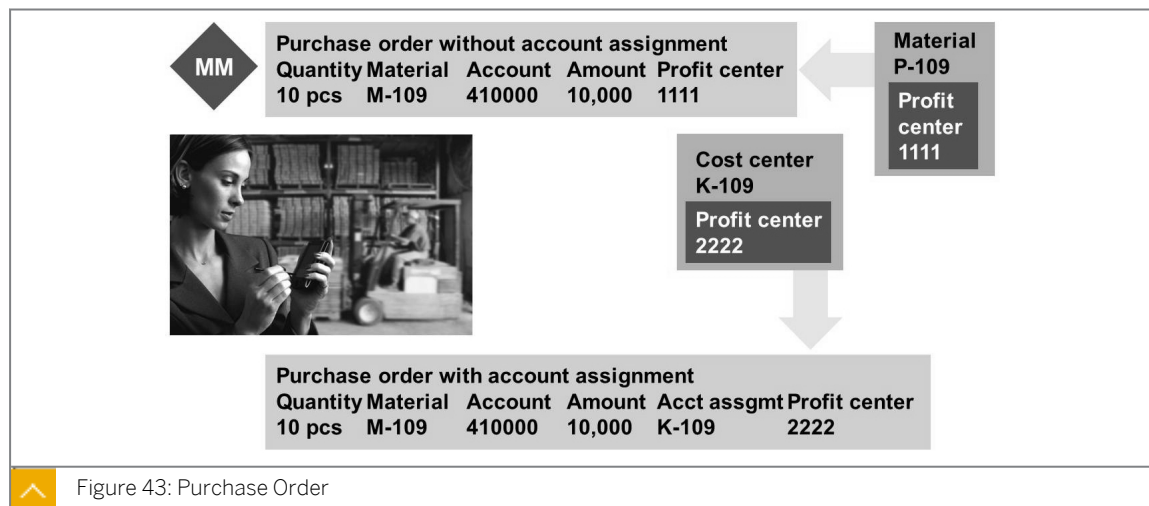


LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Explain the integration with Materials Management

Profit Centers and Materials Management



The profit center to which the data should be posted depends on which materials and Controlling (CO) objects are involved. In a purchase order to the warehouse, the profit center is taken from the material master per purchase order item. The profit center that is determined is forwarded to the goods receipt for the purchase order.

Goods Receipt for Purchase Order

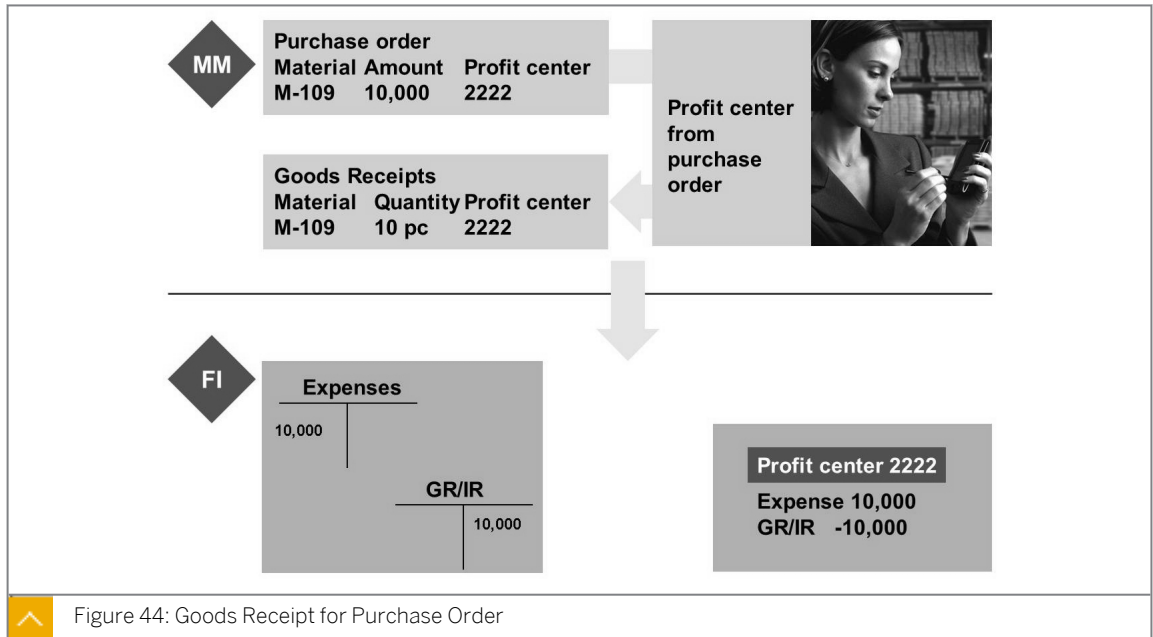
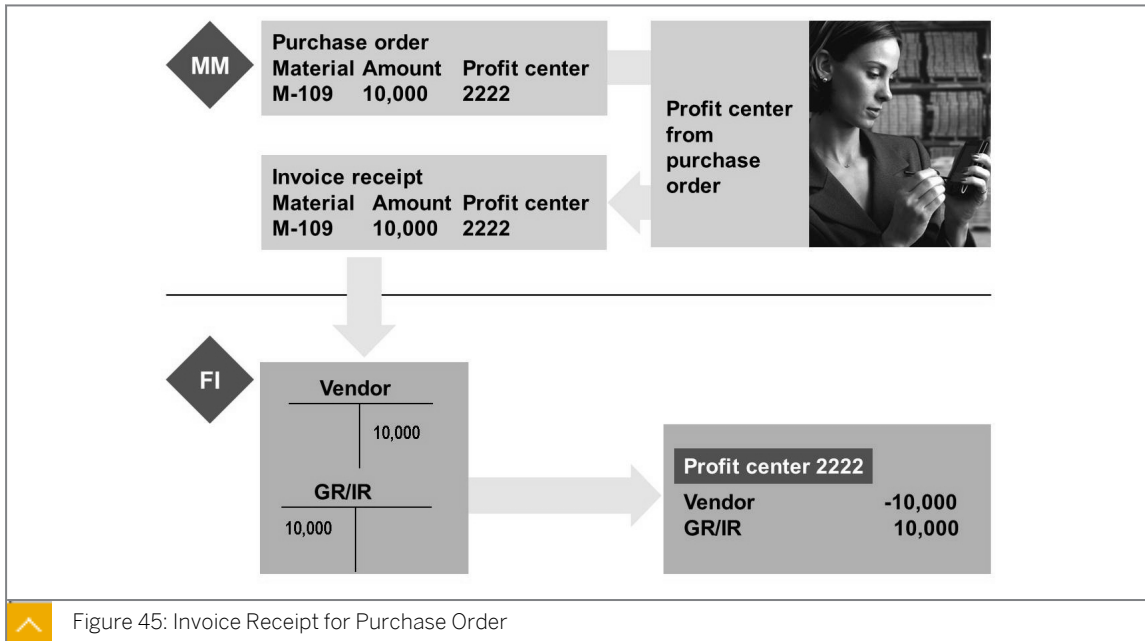


Figure 44: Goods Receipt for Purchase Order

When you post a purchase order, the system posts the goods usage immediately upon goods receipt if the purchase order has an account assignment. The GR/IR account is the clearing account for the goods and invoices received. This gives you the costs of the material consumption in the corresponding profit centers.

The segments are derived from the profit center in the material master for logistics processes as well. The profit center characteristic is saved in the material master on the *Costing 1* and (General) *Plant Data* or *Storage 2* tab pages. To achieve a zero balance setting, the system creates various clearing lines because of document splitting. These clearing lines also contain the partner objects of the accounting characteristics. When a Financial Accounting (FI) document that originated in Materials Management is split, the partner information is also included in the expense and material stocks line.

Invoice Receipt for Purchase Order



When a goods receipt posting is made, the profit center is always determined indirectly through the preceding document.

If the amount on the invoice is different to the standard price of the material purchased, price differences arise when you post the invoice receipt. These price differences are assigned to the profit center of the material purchased, provided it is a nonassigned purchase order.

If your price difference account is defined as a cost element, the amount is posted to the profit center of the corresponding CO object.



How to Transfer Material Movements to Profit Center Accounting

Order raw material *R-TO##* for the pending production of pump *R-F1##*. The goods receipt should increase the stock of the raw material. In addition, order a monitor (material M-01 in plant 1000) charged to the production cost center (*T611##*) as a replacement for an obsolete model. Enter a goods receipt for the purchase order you just entered and enter an MM invoice receipt for the previous purchase order.

1. Which profit center is assigned to material M-01 in plant 1000?
 - a) On the *SAP Easy Access* screen, choose *Logistics* → *Materials Management* → *Material Master* → *Material* → *Display* → *Display Current*.
 - b) On *Display Material Initial Screen*, enter **M-##** in the *Material* field and choose *Enter*.
 - c) Choose the *Select View(s)* pushbutton.
 - d) In the *Select View(s)* dialog box, choose the *Costing 1* view and choose *Continue*.
 - e) In the *Organizational Levels* dialog box, enter **1000** in the *Plant* field.
 - f) On the *Display Material M-01 (Trading Goods)* screen, material M-## is assigned to profit center 9999.

2. Create a purchase order in Logistics in Purchasing for Materials Management. The vendor is known.

Enter the following header data:

Field Name or Data Type	Value
<i>Vendor</i>	1000
<i>Purchasing Org.</i>	1000
<i>Purchasing Group</i>	0##
<i>Company Code</i>	1000

Enter the following purchase order item:

Field Name or Data Type	Value
<i>Acc.Assgmt Cat.</i>	Cost Center
<i>Material</i>	M-##
<i>PO Quantity</i>	1
<i>Net Price</i>	200
<i>Plant</i>	1000
<i>Storage Location</i>	001

Go to the *Account Assignment* tab in the item. Enter cost center **T611##** as the account assignment object. Press ENTER to confirm and check the entry in the *Profit Center* field. Which profit center was assigned?

- On the *SAP Easy Access* screen, choose *Logistics → Materials Management → Purchasing → Purchase Order → Create → Vendor/Supplying Plant Known*.
- On the *Org. Data* tab page, enter the data listed in the table and choose the *Item Overview* pushbutton.
- Enter the purchase order item data listed in the table.
- Press ENTER and save your order.
Profit center *611##* from the master record of cost center *T611##* is assigned.

3. Use the following data to enter another purchase order item:

Field Name or Data Type	Value
<i>Acc.Assgmt Cat.</i>	No entry
<i>Material</i>	R-T0##
<i>PO Quantity</i>	100
<i>Net Price</i>	52
<i>Plant</i>	1000
<i>Storage Location</i>	0001

Order a slug to manufacture the pump. The PO should increase the stock of slugs. Therefore, you do not need to enter an account assignment category in the PO item. Save your purchase order and write down the document number.

a) On the *SAP Easy Access* screen, choose *Logistics* → *Materials Management* → *Purchasing* → *Purchase Order* → *Create* → *Vendor/Supplying Plant Known*.

b) On the *Org. Data* tab page, enter the following data:

Field Name or Data Type	Value
<i>Vendor</i>	1000
<i>Purchasing Org.</i>	1000
<i>Purchasing Group</i>	0##
<i>Company Code</i>	1000

c) Choose the *Item Overview* pushbutton.

d) Enter the purchase order item data listed in the table.

e) Press ENTER and save your order.

f) Note down your document number.

4. Enter a goods receipt for the purchase order. Enter the PO number and flag both the PO items as OK. Use the PO number from the previous step. Check the *Account Assignment* tab. Which profit center did the system determine?

Post the goods receipt and write down the number of the material document.

a) On the *SAP Easy Access* screen, choose *Logistics* → *Materials Management* → *Inventory Management* → *Goods Movement* → *Goods Receipt* → *For Purchase Order* → *PO Number Known*.

b) On the *Goods Receipt Purchase Order* screen, enter the purchase order number from the previous task and press ENTER.

c) Choose the *Account Assignment* tab in the *Detail Data* section. Cost center *T611##* and profit center *611##* are transferred from the purchase order.

d) Choose the *Next Item* pushbutton, located at the lower-left part of the screen, to view the profit center for line 2. Profit center *1010* is derived from the material master for *R-T0##*.

e) Select the *Item OK* checkbox for both items.

f) Save your order.

5. Go to the information system for new G/L and call the *Profit Center Group: Plan/Actual/Variance* report and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L

Field Name or Data Type	Value
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group or Profit Center</i>	GROUP## or 1010

Analyze the goods receipt postings in the financial statements and profit and loss (P&L) statement of the involved profit centers.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table and choose the *Execute* pushbutton.
- c) The P&L statement for profit center *611#* shows the material expense for monitor *M-01* (EUR 200 when you select by PC group *GROUP##*).
- d) On the *Execute Profit Center Grp: Plan/Actual/Variance* screen, expand *ASSETS* → *Current assets* → *Stocks* → *Raw materials and supplies (RMS)*. The raw materials stock of profit center *1010* shows the stock of the ordered slugs.
- e) Select the *Raw Materials 1* report line.
- f) Choose *Goto* → *Call up report*. In the *Select Report* dialog box, double-click *G/L Account Line Item Display*. Sort the report in descending order by document date.
- g) Select the line item and choose the *Display Document* pushbutton.
- h) On the *Display Document: Line Item 002* screen, choose the *Call Up Document Overview* pushbutton.
The offsetting posting for both the items is made to the GR/IR account (offsetting item in the document).

6. Enter an incoming invoice in Logistics Invoice Verification.

Enter the following basic data:

Field Name or Data Type	Value
<i>Invoice Date</i>	Current date
<i>Posting Date</i>	Current date
<i>Amount</i>	5940
<i>Tax amount</i>	540
<i>Tax Code</i>	1I (Input tax 10%)

Enter the purchase order number from the previous task and confirm your entries.
Change the tax code to **1L** in the item.

Enter the amount from the invoice item in the basic data. Save your data and write down the document number.

- a) On the *SAP Easy Access* screen, choose *Logistics → Materials Management → Logistics Invoice Verification → Document Entry → Enter Invoice*.
- b) On the *Enter Incoming Invoice: Company Code 1000* screen, enter the data listed in the table.
- c) On the *PO Reference* tab page, enter the PO number from the previous step and choose *Enter*.
- d) In the invoice item, scroll to the right of the *Tax Codes* column. Change the tax code to **1L**.
- e) Post the incoming invoice.

7. Go to the information system for the new general ledger, call the *Profit Center Group: Plan/Actual/Variance* report, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group or Profit Center</i>	GROUP## or 1010

Analyze the invoice receipts in the financial statements of the involved profit centers.

- a) On the *SAP Easy Access* screen, choose *Accounting → Financial Accounting → General Ledger → Information System → General Ledger Reports (New) → Reports for Profit Center Accounting → Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection Profit Center Group: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Choose the *Execute* pushbutton.
The payables are reported in profit centers *611##* and *1010*.
The input tax is reported in profit centers *611##* and *1010*.
The GR/IR account is cleared as the offsetting posting.



Post a Material Movement to Profit Center Accounting

Business Example

You want to model the purchasing process in the profit center financial statements. Purchase orders are posted to the respective CO account assignment objects, provided they are not raw material orders that increase stock. Since payables should also be displayed at profit center level, the head of FI is interested in how profit centers are determined for goods receipt postings and invoice receipts for the respective purchase orders.

Order raw material *R-TO##* for the pending production of pump *R-F1##*. The goods receipt should increase the stock of the raw material. In addition, order a monitor (material M-01 in plant 1000) charged to the production cost center (*T611##*) as a replacement for an obsolete model. Enter a goods receipt for the purchase order you just entered and enter an MM invoice receipt for the previous purchase order.

1. Which profit center is assigned to material M-01 in plant 1000?
2. Create a purchase order in Logistics in Purchasing for Materials Management. The vendor is known.

Enter the following header data:

Field Name or Data Type	Value
<i>Vendor</i>	1000
<i>Purchasing Org.</i>	1000
<i>Purchasing Group</i>	0##
<i>Company Code</i>	1000

Enter the following purchase order item:

Field Name or Data Type	Value
<i>Acc.Assgmt Cat.</i>	Cost Center
<i>Material</i>	M-##
<i>PO Quantity</i>	1
<i>Net Price</i>	200
<i>Plant</i>	1000
<i>Storage Location</i>	001

Go to the *Account Assignment* tab in the item. Enter cost center **T611##** as the account assignment object. Press ENTER to confirm and check the entry in the *Profit Center* field. Which profit center was assigned?

3. Use the following data to enter another purchase order item:

Field Name or Data Type	Value
<i>Acc.Assgmt Cat.</i>	No entry
<i>Material</i>	R-T0##
<i>PO Quantity</i>	100
<i>Net Price</i>	52
<i>Plant</i>	1000
<i>Storage Location</i>	0001

Order a slug to manufacture the pump. The PO should increase the stock of slugs. Therefore, you do not need to enter an account assignment category in the PO item. Save your purchase order and write down the document number.

4. Enter a goods receipt for the purchase order. Enter the PO number and flag both the PO items as OK. Use the PO number from the previous step. Check the *Account Assignment* tab. Which profit center did the system determine?

Post the goods receipt and write down the number of the material document.

5. Go to the information system for new G/L and call the *Profit Center Group: Plan/Actual/Variance* report and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group or Profit Center</i>	GROUP## or 1010

Analyze the goods receipt postings in the financial statements and profit and loss (P&L) statement of the involved profit centers.

6. Enter an incoming invoice in Logistics Invoice Verification.

Enter the following basic data:

Field Name or Data Type	Value
<i>Invoice Date</i>	Current date
<i>Posting Date</i>	Current date
<i>Amount</i>	5940
<i>Tax amount</i>	540
<i>Tax Code</i>	1I (Input tax 10%)

Enter the purchase order number from the previous task and confirm your entries. Change the tax code to **1I** in the item.

Enter the amount from the invoice item in the basic data. Save your data and write down the document number.

7. Go to the information system for the new general ledger, call the *Profit Center Group: Plan/Actual/Variance* report, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group or Profit Center</i>	GROUP## or 1010

Analyze the invoice receipts in the financial statements of the involved profit centers.



Post a Material Movement to Profit Center Accounting

Business Example

You want to model the purchasing process in the profit center financial statements. Purchase orders are posted to the respective CO account assignment objects, provided they are not raw material orders that increase stock. Since payables should also be displayed at profit center level, the head of FI is interested in how profit centers are determined for goods receipt postings and invoice receipts for the respective purchase orders.

Order raw material *R-TO##* for the pending production of pump *R-F1##*. The goods receipt should increase the stock of the raw material. In addition, order a monitor (material M-01 in plant 1000) charged to the production cost center (*T611##*) as a replacement for an obsolete model. Enter a goods receipt for the purchase order you just entered and enter an MM invoice receipt for the previous purchase order.

1. Which profit center is assigned to material M-01 in plant 1000?
 - a) On the *SAP Easy Access* screen, choose *Logistics → Materials Management → Material Master → Material → Display → Display Current*.
 - b) On *Display Material Initial Screen*, enter **M-##** in the *Material* field and choose *Enter*.
 - c) Choose the *Select View(s)* pushbutton.
 - d) In the *Select View(s)* dialog box, choose the *Costing 1* view and choose *Continue*.
 - e) In the *Organizational Levels* dialog box, enter **1000** in the *Plant* field.
 - f) On the *Display Material M-01 (Trading Goods)* screen, material *M-##* is assigned to profit center 9999.
2. Create a purchase order in Logistics in Purchasing for Materials Management. The vendor is known.

Enter the following header data:

Field Name or Data Type	Value
<i>Vendor</i>	1000
<i>Purchasing Org.</i>	1000
<i>Purchasing Group</i>	0##
<i>Company Code</i>	1000

Enter the following purchase order item:

Field Name or Data Type	Value
<i>Acc.Assgmt Cat.</i>	Cost Center

Field Name or Data Type	Value
<i>Material</i>	M-##
<i>PO Quantity</i>	1
<i>Net Price</i>	200
<i>Plant</i>	1000
<i>Storage Location</i>	001

Go to the *Account Assignment* tab in the item. Enter cost center **T611##** as the account assignment object. Press ENTER to confirm and check the entry in the *Profit Center* field. Which profit center was assigned?

- a) On the *SAP Easy Access* screen, choose *Logistics → Materials Management → Purchasing → Purchase Order → Create → Vendor/Supplying Plant Known*.
- b) On the *Org. Data* tab page, enter the data listed in the table and choose the *Item Overview* pushbutton.
- c) Enter the purchase order item data listed in the table.
- d) Press ENTER and save your order.
Profit center **611##** from the master record of cost center **T611##** is assigned.

3. Use the following data to enter another purchase order item:

Field Name or Data Type	Value
<i>Acc.Assgmt Cat.</i>	No entry
<i>Material</i>	R-T0##
<i>PO Quantity</i>	100
<i>Net Price</i>	52
<i>Plant</i>	1000
<i>Storage Location</i>	0001

Order a slug to manufacture the pump. The PO should increase the stock of slugs. Therefore, you do not need to enter an account assignment category in the PO item. Save your purchase order and write down the document number.

- a) On the *SAP Easy Access* screen, choose *Logistics → Materials Management → Purchasing → Purchase Order → Create → Vendor/Supplying Plant Known*.
- b) On the *Org. Data* tab page, enter the following data:

Field Name or Data Type	Value
<i>Vendor</i>	1000
<i>Purchasing Org.</i>	1000
<i>Purchasing Group</i>	0##

Field Name or Data Type	Value
<i>Company Code</i>	1000

- c) Choose the *Item Overview* pushbutton.
 - d) Enter the purchase order item data listed in the table.
 - e) Press ENTER and save your order.
 - f) Note down your document number.
4. Enter a goods receipt for the purchase order. Enter the PO number and flag both the PO items as OK. Use the PO number from the previous step. Check the *Account Assignment* tab. Which profit center did the system determine?
Post the goods receipt and write down the number of the material document.
- a) On the *SAP Easy Access* screen, choose *Logistics* → *Materials Management* → *Inventory Management* → *Goods Movement* → *Goods Receipt* → *For Purchase Order* → *PO Number Known*.
 - b) On the *Goods Receipt Purchase Order* screen, enter the purchase order number from the previous task and press ENTER.
 - c) Choose the *Account Assignment* tab in the *Detail Data* section. Cost center *T611##* and profit center *611##* are transferred from the purchase order.
 - d) Choose the *Next Item* pushbutton, located at the lower-left part of the screen, to view the profit center for line 2. Profit center *1010* is derived from the material master for *R-T0##*.
 - e) Select the *Item OK* checkbox for both items.
 - f) Save your order.
5. Go to the information system for new G/L and call the *Profit Center Group: Plan/Actual/Variance* report and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group or Profit Center</i>	GROUP## or 1010

Analyze the goods receipt postings in the financial statements and profit and loss (P&L) statement of the involved profit centers.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table and choose the *Execute* pushbutton.
- c) The P&L statement for profit center 611# shows the material expense for monitor M-01 (EUR 200 when you select by PC group GROU###).
- d) On the *Execute Profit Center Grp: Plan/Actual/Variance* screen, expand *ASSETS* → *Current assets* → *Stocks* → *Raw materials and supplies (RMS)*.
- e) The raw materials stock of profit center 1010 shows the stock of the ordered slugs and select the *Raw Materials 1* report line.
- f) Choose the line and then choose *Goto* → *Call up report*.
- g) In the *Select Report* dialog box, double-click *G/L Account Line Item Display*. Sort the report in descending order by document date.
- h) Select the box, in front of the line, for the document. Choose the *Display Document* pushbutton.
- i) On the *Display Document: Line Item 002* screen, choose the *Call Up Document Overview* pushbutton.
The offsetting posting for both the items is made to the GR/IR account (offsetting item in the document).

6. Enter an incoming invoice in Logistics Invoice Verification.

Enter the following basic data:

Field Name or Data Type	Value
<i>Invoice Date</i>	Current date
<i>Posting Date</i>	Current date
<i>Amount</i>	5940
<i>Tax amount</i>	540
<i>Tax Code</i>	1I (Input tax 10%)

Enter the purchase order number from the previous task and confirm your entries. Change the tax code to **1I** in the item.

Enter the amount from the invoice item in the basic data. Save your data and write down the document number.

- a) On the *SAP Easy Access* screen, choose *Logistics* → *Materials Management* → *Logistics Invoice Verification* → *Document Entry* → *Enter Invoice*.
- b) On the *Enter Incoming Invoice: Company Code 1000* screen, enter the data listed in the table.

- c) On the *PO Reference* tab page, enter the PO number from the previous step and choose *Enter*.
 - d) In the invoice item, scroll to the right of the *Tax Codes* column. Change the tax code to **1L**.
 - e) Post the incoming invoice.
7. Go to the information system for the new general ledger, call the *Profit Center Group: Plan/Actual/Variance* report, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group or Profit Center</i>	GROUP## or 1010

Analyze the invoice receipts in the financial statements of the involved profit centers.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection Profit Center Group: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Choose the *Execute* pushbutton.
 The payables are reported in profit centers *611##* and *1010*.
 The input tax is reported in profit centers *611##* and *1010*.
 The GR/IR account is cleared as the offsetting posting.



LESSON SUMMARY

You should now be able to:

- Explain the integration with Materials Management



Drafting the Integration of Cost Object Controlling with Profit Center Accounting

LESSON OVERVIEW

This lesson explains the integration of Cost Object Controlling with Profit Center Accounting (PCA).

Business Example

You want to transfer primary and secondary costs postings from Cost Object Controlling to PCA. For this reason, you require the following knowledge:

- An understanding of the integration of Cost Object Controlling with PCA



Explain the content from a business perspective using the technical settings in the system.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Draft the integration of Cost Object Controlling and Profit Center Accounting

Profit Centers and Cost Object Controlling

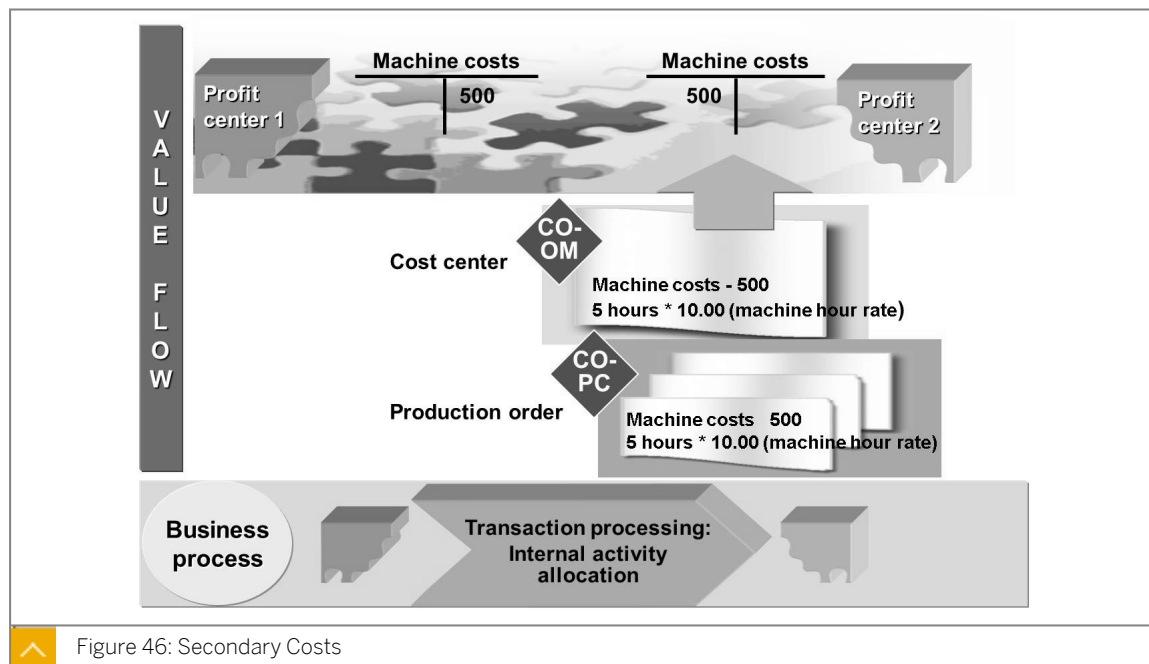


Figure 46: Secondary Costs

Now, with the profit center values stored in new General Ledger Accounting, each profit center movement is reflected in an FI document. For this reason, account determination is needed when documents are transferred from Controlling (CO) to new General Ledger

Accounting within the real-time integration from CO to FI framework. As a result, you can display both secondary cost elements and profit and loss (P&L) or balance sheet accounts in the *Account* field in a Report Painter report or drilldown report. The new G/L makes it possible to create a report exclusively using cost elements as well as to display the cost element as additional information in a report.

The profit center of the sender account assignment object is credited, and the corresponding profit center of the receiver account assignment object is specified as the partner profit center.

In addition, the receiver's profit center is charged and the sender's profit center is recorded as the partner profit center.

All secondary allocations between CO objects are mapped to the assigned profit centers through real-time integration (for example, utilization of cost center activities for a production order).

Cost Object Controlling – Goods Issue

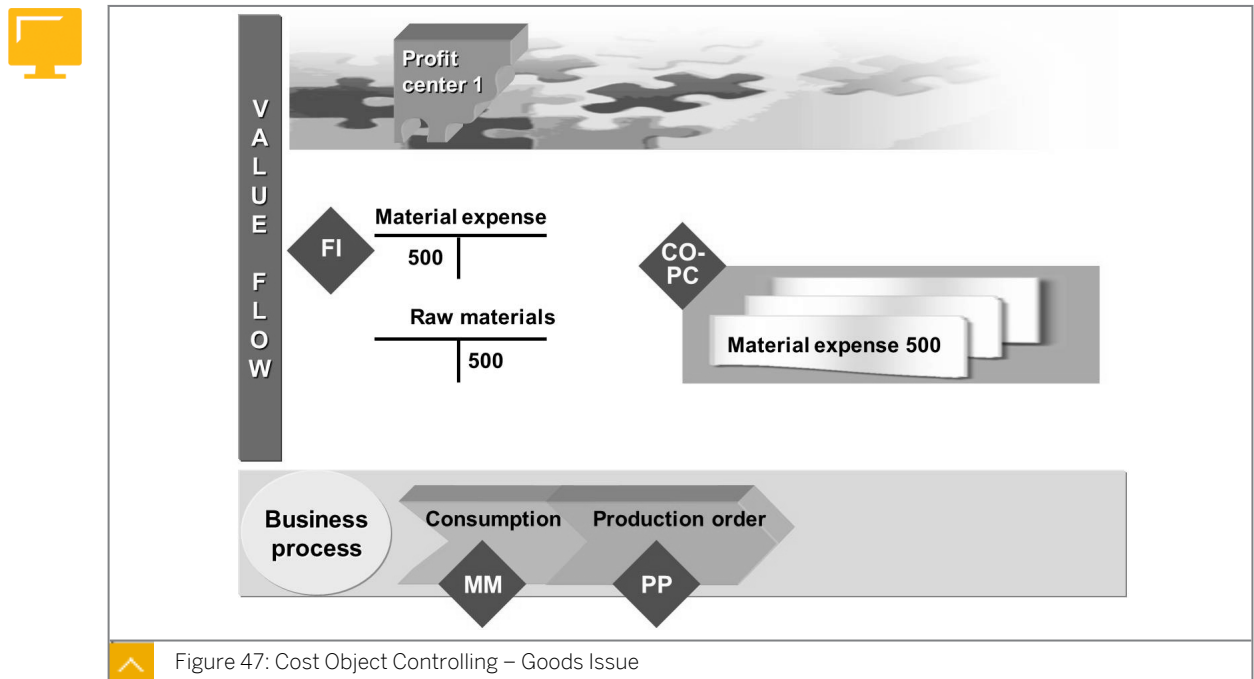


Figure 47: Cost Object Controlling – Goods Issue

This example shows the withdrawal of a material from the warehouse for a production order. The profit center of the production order is determined based on the materials produced.

In this example, the material master record for the raw materials belongs to the same profit center as the production order from the perspective of PCA.

The raw material account stores withdrawal for the production order, and maps the stock and consumption postings to the same profit center. The profit center and partner profit center are identical in this case.



How to Transfer Secondary Costs Elements from Cost Object Controlling to Profit Center Accounting

Create a production order in Production Planning and Control (PP) and post the goods issue for the production of pump **R-F1##**. Enter the confirmation of the completed order. To perform period-end closing for the order, determine any variances and settle the order.

1. Create a production order (transaction code **CO01**) with the following data:

Field Name or Data Type	Value
<i>Material</i>	R-F1##
<i>Production Plant</i>	1000
<i>Order Type</i>	PP01

Enter the following data in the order:

Field Name or Data Type	Value
<i>Total Quantity</i>	50
<i>Start</i>	Today's date
<i>Scheduling Type</i>	<i>Forwards</i>

Choose *Functions* → *Release*.

On the *Assignment* tab page, check the profit center assignment. If profit center **612##** is assigned, save the order.

- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Order* → *Create* → *With Material*.
- b) On *Production Order Create: Initial Screen*, enter the data as provided in the table.
- c) On the *Production Order Create: Header* screen, choose *Functions* → *Release*.
- d) In the *Release Order* dialog box, choose the *Release Order* pushbutton.
- e) Save your order and write down the order number.

2. Enter the goods issue, charged to the production order, with the following data:

Field Name or Data Type	Value
<i>Movement Type</i>	261
<i>Plant</i>	1000
<i>Storage Location</i>	0001

- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Goods Movements* → *Goods Issue* (**MB1A**).
- b) On *Enter Goods Issue: Initial Screen*, enter the data as provided in the table.

- c) Choose *Goods Issue* → *Create with Reference* → *To Order*.
 - d) In the *Reference: Order* dialog box, enter the production order number from the previous task.
 - e) Choose *Continue*.
You see the assemblies that comprise the pump, together with the quantities from the production order.
 - f) Post your order.
3. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	612##

Analyze the goods issue from production in the P&L statement for profit center 612##.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
 - b) On the *Selection Profit Center Grp: Plan/Actual/Variance* screen, enter the data as provided in the table.
 - c) Choose the *Execute* pushbutton.
The consumption of the semifinished products is reported in the P&L statement of profit center 612##.
4. For test purposes, enter the confirmation for the individual order, not for the individual operations from the routing (transaction code C015).
Enter a quantity of 50 pieces. No scrap or other quantities are generated.
Save the confirmation.
- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Confirmation* → *Enter* → *For Order*.
 - b) On *Enter Production Order Confirmation: Initial Screen*, enter your order number in the *Order* field.

- c) Press ENTER.
 - d) Post your order.
5. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	612##

Analyze the posting in the P&L statement for profit center 612## that results from the confirmation. Normally, this involves secondary costs from CO. Why can we see these costs in new G/L?

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
 - b) On the *Profit Center Grp: Plan/Actual/Variance* screen, enter the data as provided in the table.
 - c) Post your data.
The secondary costs for the confirmation are transferred to new G/L through the real-time integration.
6. During period-end closing in Cost Object Controlling, you determine the variances in the order that correspond to the current balance of the production order. In the settlement, you post the balance as production differences in FI, and therefore at profit center level. Execute the variance calculation as an update run. Use the current period and deselect the *Test Run* radio button.
Execute settlement as an update run. Use the current period and deselect the *Test Run* radio button.
- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop-Floor Control* → *Period-End Closing* → *Variances* → *Individual Processing*.
 - b) On *Variance calculation: Initial Screen*, use the current period and deselect the *Test Run* radio button.
 - c) Choose the *Execute* pushbutton.

- d) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Period-End Closing* → *Settlement* → *Individual Processing*.
 - e) On the *Actual Settlement: Order* screen, use the current period and deselect the *Test Run* radio button.
 - f) Choose the *Execute* pushbutton.
7. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	612##

Analyze the posting in the settlement (production variances) for profit center 612## that results from the confirmation.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Group: Plan/Actual/Variance* screen, enter the data as provided in the table.
- c) Save your data.
The variances are reported as plant activity and production differences.

Unit 3

Exercise 6



Settle a Production Order and Verify the Resulting Postings in Profit Center Accounting

Business Example

Your company wants to analyze the production costs of the pump in a suitable report in Financial Accounting (FI). To enable this, the secondary costs from production are to be transferred to FI.

Task 1

Create a production order in PP.

1. Create a production order (transaction code CO01) with the following data:

Field Name or Data Type	Value
<i>Material</i>	R-F1##
<i>Production Plant</i>	1000
<i>Order Type</i>	PP01

Enter the following data in the order:

Field Name or Data Type	Value
<i>Total Quantity</i>	50
<i>Start</i>	Today's date
<i>Scheduling Type</i>	<i>Forwards</i>

Choose *Functions* → *Release*.

On the *Assignment* tab page, check the profit center assignment. If profit center 612## is assigned, save the order.

Task 2

Post the goods issue for the production of pump R-F1##.

1. Enter the goods issue, charged to the production order, with the following data:

Field Name or Data Type	Value
<i>Movement Type</i>	261
<i>Plant</i>	1000

Field Name or Data Type	Value
<i>Storage Location</i>	0001

2. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	612##

Analyze the goods issue from production in the P&L statement for profit center 612##.

Task 3

Enter the confirmation of the complete order.

- For test purposes, enter the confirmation for the individual order, not for the individual operations from the routing (transaction code **CO15**).
Enter a quantity of **50** pieces. No scrap or other quantities are generated.
Save the confirmation.
- Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From period</i>	1

Field Name or Data Type	Value
<i>To period</i>	12
<i>Profit Center</i>	612##

Analyze the posting in the P&L statement for profit center *612##* that results from the confirmation. Normally, this involves secondary costs from CO. Why can we see these costs in new G/L?

Task 4

To perform period-end closing for the order, determine any variances and settle the order.

1. During the period-end closing in Cost Object Controlling, you determine the variances in the order that correspond to the current balance of the production order. In the settlement, you post the balance as production differences in FI, and therefore at profit center level.

Execute the variance calculation as an update run. Use the current period and deselect the *Test Run* radio button.

Execute settlement as an update run. Use the current period and deselect the *Test Run* radio button.

2. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	612##

Analyze the posting in the settlement (production variances) for profit center *612##* that results from the confirmation.



Settle a Production Order and Verify the Resulting Postings in Profit Center Accounting

Business Example

Your company wants to analyze the production costs of the pump in a suitable report in Financial Accounting (FI). To enable this, the secondary costs from production are to be transferred to FI.

Task 1

Create a production order in PP.

1. Create a production order (transaction code CO01) with the following data:

Field Name or Data Type	Value
<i>Material</i>	R-F1##
<i>Production Plant</i>	1000
<i>Order Type</i>	PP01

Enter the following data in the order:

Field Name or Data Type	Value
<i>Total Quantity</i>	50
<i>Start</i>	Today's date
<i>Scheduling Type</i>	<i>Forwards</i>

Choose *Functions* → *Release*.

On the *Assignment* tab page, check the profit center assignment. If profit center 612## is assigned, save the order.

- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Order* → *Create* → *With Material*.
- b) On *Production Order Create: Initial Screen*, enter the data as provided in the table.
- c) On the *Production Order Create: Header* screen, choose *Functions* → *Release*.
- d) In the *Release Order* dialog box, choose the *Release Order* pushbutton.
- e) Save your order and write down the order number.

Task 2

Post the goods issue for the production of pump R-F1##.

1. Enter the goods issue, charged to the production order, with the following data:

Field Name or Data Type	Value
<i>Movement Type</i>	261
<i>Plant</i>	1000
<i>Storage Location</i>	0001

- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Goods Movements* → *Goods Issue (MB1A)*.
- b) On *Enter Goods Issue: Initial Screen*, enter the data as provided in the table.
- c) Choose *Goods Issue* → *Create with Reference* → *To Order*.
- d) In the *Reference: Order* dialog box, enter the production order number from the previous task.
- e) Choose *Continue*.
You see the assemblies that comprise the pump, together with the quantities from the production order.
- f) Post your order.
2. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	612##

Analyze the goods issue from production in the P&L statement for profit center 612##.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection Profit Center Grp: Plan/Actual/Variance* screen, enter the data as provided in the table.

- c) Choose the *Execute* pushbutton.

The consumption of the semifinished products is reported in the P&L statement of profit center 612##.

Task 3

Enter the confirmation of the complete order.

1. For test purposes, enter the confirmation for the individual order, not for the individual operations from the routing (transaction code CO15).

Enter a quantity of **50** pieces. No scrap or other quantities are generated.

Save the confirmation.

- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Confirmation* → *Enter* → *For Order*.
- b) On *Enter Production Order Confirmation: Initial Screen*, enter your order number in the *Order* field.
- c) Press ENTER.
- d) Post your order.
2. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	612##

Analyze the posting in the P&L statement for profit center 612## that results from the confirmation. Normally, this involves secondary costs from CO. Why can we see these costs in new G/L?

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Profit Center Grp: Plan/Actual/Variance* screen, enter the data as provided in the table.

c) Post your data.

The secondary costs for the confirmation are transferred to new G/L through the real-time integration.

Task 4

To perform period-end closing for the order, determine any variances and settle the order.

1. During the period-end closing in Cost Object Controlling, you determine the variances in the order that correspond to the current balance of the production order. In the settlement, you post the balance as production differences in FI, and therefore at profit center level.

Execute the variance calculation as an update run. Use the current period and deselect the *Test Run* radio button.

Execute settlement as an update run. Use the current period and deselect the *Test Run* radio button.

- a) On the *SAP Easy Access* screen, choose *Logistics → Production → Shop-Floor Control → Period-End Closing → Variances → Individual Processing*.
 - b) On *Variance calculation: Initial Screen*, use the current period and deselect the *Test Run* radio button.
 - c) Choose the *Execute* pushbutton.
 - d) On the *SAP Easy Access* screen, choose *Logistics → Production → Shop Floor Control → Period-End Closing → Settlement → Individual Processing*.
 - e) On the *Actual Settlement: Order* screen, use the current period and deselect the *Test Run* radio button.
 - f) Choose the *Execute* pushbutton.
2. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	612##

Analyze the posting in the settlement (production variances) for profit center 612## that results from the confirmation.

- a) On the SAP Easy Access screen, choose *Accounting → Financial Accounting → General Ledger → Information System → General Ledger Reports (New) → Reports for Profit Center Accounting → Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Group: Plan/Actual/Variance* screen, enter the data as provided in the table.
- c) Save your data.

The variances are reported as plant activity and production differences.



LESSON SUMMARY

You should now be able to:

- Draft the integration of Cost Object Controlling and Profit Center Accounting



Discussing the Integration of Sales and Distribution and Profit Center Accounting

LESSON OVERVIEW

This lesson explains the integration of Sales and Distribution (SD) and Profit Center Accounting (PCA).

Business Example

You post the goods issue and billing document in PCA and need to explain the value flow from SD to the profit centers. For this reason, you require the following knowledge:

- An understanding of the profit center postings within the sales from stock process



Explain the content from a business perspective, emphasizing the technical settings that need to be used.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Outline the integration of Sales and Distribution and Profit Center Accounting

Profit Centers and Sales and Distribution

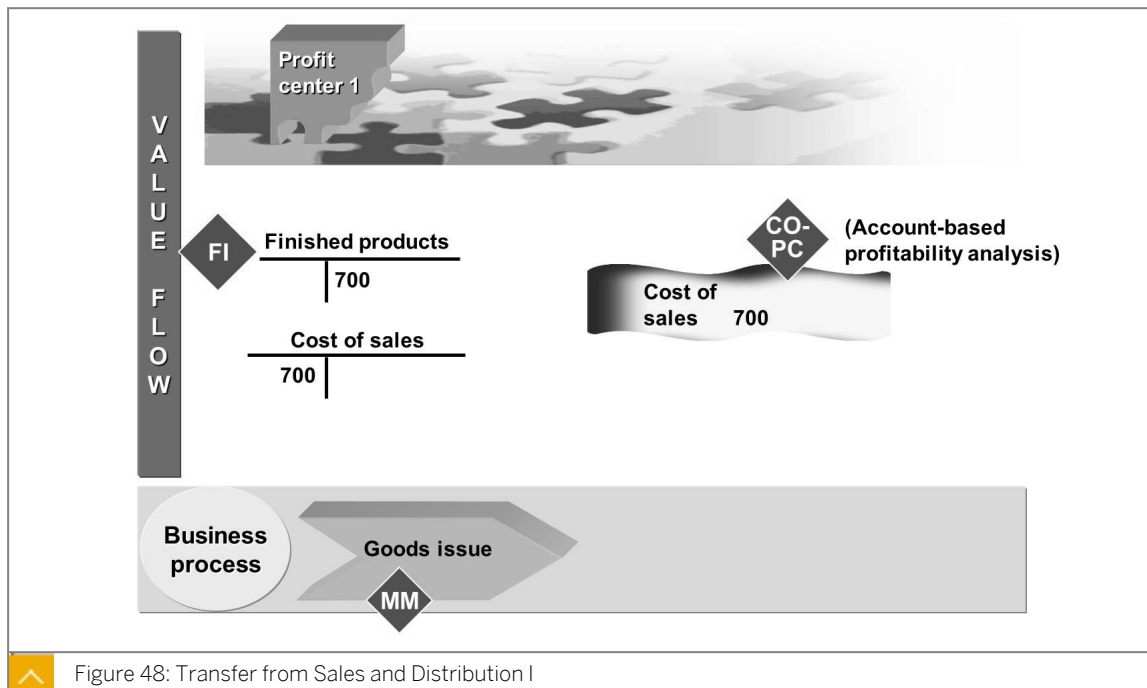


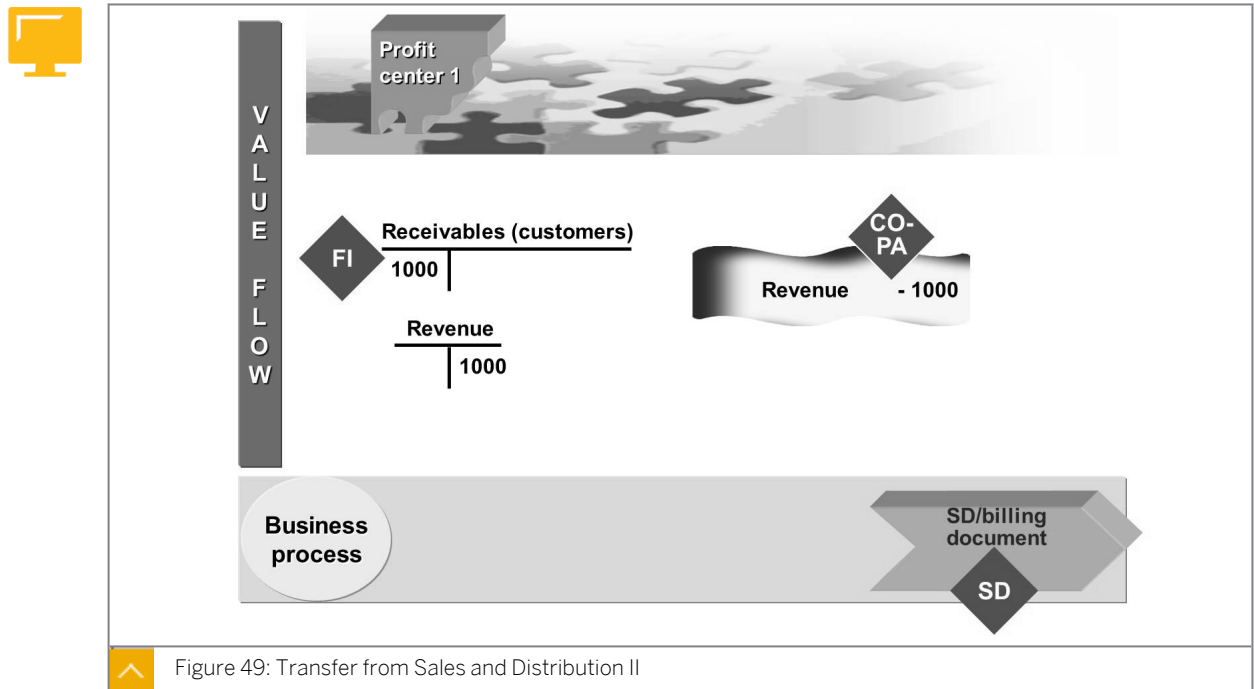
Figure 48: Transfer from Sales and Distribution I

The assignment of a profit center for a sales order is passed from the sales order to the delivery note, and then on to the billing document. The change in stock is posted to the profit center upon goods issue.

If account-based profitability analysis (CO-PA) is active in your system, the general ledger account for changes in stock must be defined as a cost element. If CO-PA is not active, you must define this account as a profit and loss (P&L) account.

The profit center is assigned at the item level of the sales order.

Transfer from Sales and Distribution



The following data is transferred from billing documents and debit and credit memos to PCA:

- Revenues
- Sales deductions (shipping, rebates, and so on)
- Accruals (for example, from rebate agreements)



Note:

The figure shows a simplified example of a logistical SD process with the generated profit center postings.



How to Transfer Postings from Sales and Distribution to Profit Center Accounting

Create a sales order and the outbound delivery for the sales order, pick the delivery, and post the goods issue. Bill the outbound delivery and analyze the sales process in a standard profit center report.

1. Create a sales order with the following parameters:

Field Name or Data Type	Value
<i>Sales Order</i>	
<i>Order Type</i>	OR (for <i>EN</i>) TA (for <i>DE</i>)
<i>Sales Organization</i>	1000
<i>Distribution Channel</i>	10
<i>Division</i>	00
<i>Standard Order</i>	
<i>Sold-To-Party</i>	T-CSD##
<i>Ship-To-Party</i>	T-CSD##
<i>PO Number</i>	PUMP ##
<i>Material</i>	R-F1##
<i>Order Quantity</i>	30

Check the account assignment of this order item in the item details. Which profit center was assigned?

Post the document and write down the document number _____.

- a) On the *SAP Easy Access* screen, choose *Logistics* → *Sales and Distribution* → *Sales* → *Order* → *Create*.
- b) On *Create Sales Order: Initial Screen*, enter the sales order data listed in the table.
- c) Press ENTER.
- d) On the *Create Standard Order: Overview* screen, enter the standard order data listed in the table.
- e) Press ENTER.
- f) Double-click line item *10*.
- g) On the *Account Assignment* tab page, note the profit center.
- h) Post your order.
Profit center *612##* is automatically determined by the system because it is entered in the master record of material *R-F1##*.

2. Create an outbound delivery for the sales order.

Use the following parameters:

Field Name or Data Type	Value
<i>Shipping Point</i>	1000
<i>Selection Date</i>	Current date + 1 month

Field Name or Data Type	Value
<i>Order</i>	Sales order number

Save the outbound delivery and write down the document number

_____.

- a) On the *SAP Easy Access* screen, choose *Logistics → Sales and Distribution → Shipping and Transportation → Outbound Delivery → Create → Single Document → With Reference to Sales Order (VL01N)*.
- b) On the *Create Outbound Delivery With Order Reference* screen, enter the data listed in the table.
- c) Return to the *SAP Easy Access* screen.

3. Create a transfer order to pick the order. Enter the following data:

Field Name or Data Type	Value
<i>Warehouse Number</i>	010
<i>Delivery</i>	Document number of delivery
<i>Plant</i>	1000
<i>Activate Item</i>	Select
<i>Foreground/Backgrnd</i>	<i>System-Guided</i>

Press ENTER and post the transfer order. No entries are necessary as picking is carried out automatically.

- a) On the *SAP Easy Access* screen, choose *Logistics → Sales and Distribution → Shipping and Transportation → Picking → Create Transfer Order → Single Document*.
 - b) On *Create Transfer Order for Delivery Note: Initial Screen*, enter the data listed in the table.
 - c) Return to the *SAP Easy Access* screen.
4. Post the goods issue by changing the outbound delivery you created in the previous step.
- a) On the *SAP Easy Access* screen, choose *Logistics → Sales and Distribution → Shipping and Transportation → Outbound Delivery → Change → Single Document*.
 - b) On the *Change Outbound Delivery* screen, choose the *Post Goods Issue* pushbutton.
5. Go to the information system for the new general ledger, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT

Field Name or Data Type	Value
<i>Plan Version</i>	0
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Or Values</i>	612##

Analyze the postings to the financial statements and P&L statement for profit center 612## that result from the delivery and billing.

- a) On the SAP Easy Access screen, choose *Accounting → Financial Accounting → General Ledger → Information System → General Ledger Reports (New) → Reports for Profit Center Accounting → Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Press ENTER.

The goods issue associated with the outbound delivery reduced stocks. The manufacturing costs of the sales (stock change) were posted. Domestic receivables and sales revenues were posted during billing.

Unit 3

Exercise 7



Process the Sales Order

Business Example

The pumps you manufacture, *R-F1##*, are currently in stock. You want to reduce warehouse stocks through the sales process.

Task 1

Create a sales order.

1. Create a sales order with the following parameters:

Field Name or Data Type	Value
<i>Sales Order</i>	
<i>Order Type</i>	OR (for <i>EN</i>) TA (for <i>DE</i>)
<i>Sales Organization</i>	1000
<i>Distribution Channel</i>	10
<i>Division</i>	00
<i>Standard Order</i>	
<i>Sold-To-Party</i>	T-CSD##
<i>Ship-To-Party</i>	T-CSD##
<i>PO Number</i>	PUMP ##
<i>Material</i>	R-F1##
<i>Order Quantity</i>	30

Check the account assignment of this order item in the item details. Which profit center was assigned?

Post the document and write down the document number _____.

Task 2

Create the outbound delivery for the sales order, pick the delivery, and post the goods issue.

1. Create an outbound delivery for the sales order.
Use the following parameters:

Field Name or Data Type	Value
<i>Shipping Point</i>	1000
<i>Selection Date</i>	Current date + 1 month
<i>Order</i>	Sales order number

Save the outbound delivery and write down the document number

_____.

2. Create a transfer order to pick the order. Enter the following data:

Field Name or Data Type	Value
<i>Warehouse Number</i>	010
<i>Delivery</i>	Document number of delivery
<i>Plant</i>	1000
<i>Activate Item</i>	Select
<i>Foreground/Backgrnd</i>	<i>System-Guided</i>

Press ENTER and post the transfer order. No entries are necessary as picking is carried out automatically.

3. Post the goods issue by changing the outbound delivery you created in the previous step.

Task 3

Analyze the sales process in a standard profit center report.

1. Go to the information system for the new general ledger, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Or Values</i>	612##

Analyze the postings to the financial statements and P&L statement for profit center 612## that result from the delivery and billing.

Unit 3

Solution 7



Process the Sales Order

Business Example

The pumps you manufacture, *R-F1##*, are currently in stock. You want to reduce warehouse stocks through the sales process.

Task 1

Create a sales order.

1. Create a sales order with the following parameters:

Field Name or Data Type	Value
<i>Sales Order</i>	
<i>Order Type</i>	OR (for <i>EN</i>) TA (for <i>DE</i>)
<i>Sales Organization</i>	1000
<i>Distribution Channel</i>	10
<i>Division</i>	00
<i>Standard Order</i>	
<i>Sold-To-Party</i>	T-CSD##
<i>Ship-To-Party</i>	T-CSD##
<i>PO Number</i>	PUMP ##
<i>Material</i>	R-F1##
<i>Order Quantity</i>	30

Check the account assignment of this order item in the item details. Which profit center was assigned?

Post the document and write down the document number _____.

- a) On the *SAP Easy Access* screen, choose *Logistics* → *Sales and Distribution* → *Sales* → *Order* → *Create*.
- b) On *Create Sales Order: Initial Screen*, enter the sales order data listed in the table.
- c) Press ENTER.
- d) On the *Create Standard Order: Overview* screen, enter the standard order data listed in the table.

- e) Press ENTER.
- f) Double-click line item 10.
- g) On the *Account Assignment* tab page, note the profit center.
- h) Post your order.
Profit center 612## is automatically determined by the system because it is entered in the master record of material R-F1##.

Task 2

Create the outbound delivery for the sales order, pick the delivery, and post the goods issue.

1. Create an outbound delivery for the sales order.

Use the following parameters:

Field Name or Data Type	Value
<i>Shipping Point</i>	1000
<i>Selection Date</i>	Current date + 1 month
<i>Order</i>	Sales order number

Save the outbound delivery and write down the document number

_____.

- a) On the *SAP Easy Access* screen, choose *Logistics → Sales and Distribution → Shipping and Transportation → Outbound Delivery → Create → Single Document → With Reference to Sales Order (VL01N)*.
 - b) On the *Create Outbound Delivery With Order Reference* screen, enter the data listed in the table.
 - c) Return to the *SAP Easy Access* screen.
2. Create a transfer order to pick the order. Enter the following data:

Field Name or Data Type	Value
<i>Warehouse Number</i>	010
<i>Delivery</i>	Document number of delivery
<i>Plant</i>	1000
<i>Activate Item</i>	Select
<i>Foreground/Backgrnd</i>	<i>System-Guided</i>

Press ENTER and post the transfer order. No entries are necessary as picking is carried out automatically.

- a) On the *SAP Easy Access* screen, choose *Logistics → Sales and Distribution → Shipping and Transportation → Picking → Create Transfer Order → Single Document*.

- b) On *Create Transfer Order for Delivery Note: Initial Screen*, enter the data listed in the table.
 - c) Return to the *SAP Easy Access* screen.
3. Post the goods issue by changing the outbound delivery you created in the previous step.
- a) On the *SAP Easy Access* screen, choose *Logistics → Sales and Distribution → Shipping and Transportation → Outbound Delivery → Change → Single Document*.
 - b) On the *Change Outbound Delivery* screen, choose the *Post Goods Issue* pushbutton.

Task 3

Analyze the sales process in a standard profit center report.

1. Go to the information system for the new general ledger, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Or Values</i>	612##

Analyze the postings to the financial statements and P&L statement for profit center 612## that result from the delivery and billing.

- a) On the *SAP Easy Access* screen, choose *Accounting → Financial Accounting → General Ledger → Information System → General Ledger Reports (New) → Reports for Profit Center Accounting → Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Press ENTER.
- d) The goods issue associated with the outbound delivery reduced stocks. The manufacturing costs of the sales (stock change) were posted.
Domestic receivables and sales revenues were posted to during billing.



LESSON SUMMARY

You should now be able to:

- Outline the integration of Sales and Distribution and Profit Center Accounting



Processing Allocations in Profit Center Accounting

LESSON OVERVIEW

This lesson explains the use of allocations in Profit Center Accounting (PCA).

Business Example

You need to prepare for a project meeting concerning allocations for profit centers. For this reason, you require the following knowledge:

- An understanding of how to process profit center allocations



Explain the content from a business perspective using the technical settings in the system.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Define and execute a profit center allocation

Profit Center Allocations

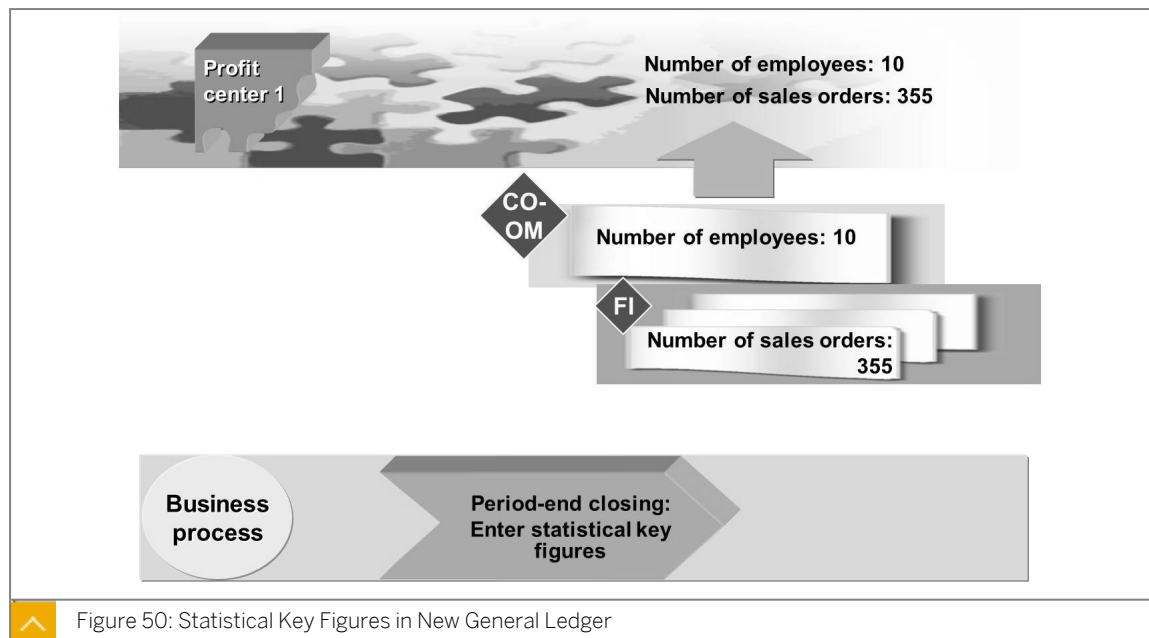


Figure 50: Statistical Key Figures in New General Ledger

Allocation (assessment and distribution) of overhead costs is usually performed at period closing. Allocation is normally performed directly at cost center level; the postings are transferred to the profit centers in the new general ledger through real-time integration. If postings were made to the dummy or default profit centers, you allocate them to the

production profit centers as assessments during the period-end closing. You use *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Statistical Key Figures* → *Transfer Opening Balance from CO* to transfer the data from Overhead Cost Controlling (CO-OM) that was recorded based on the statistical key figures.

Transfer of Opening Balance

A transfer may be needed for the following reasons:

- The dataset in CO-OM is an opening balance. You want to rebuild the dataset in general ledger accounting.
- You have created a new ledger in general ledger accounting and want to rebuild the statistical key figures in general ledger accounting as a result. When you transfer the statistical key figures from CO (either online or with the program which runs in *Customizing for General Ledger Accounting (New)* → *Statistical Key Figures* → *Transfer Opening Balance from CO*), only those characteristics that are managed as a scenario in at least one ledger in general ledger accounting are updated. This means if you only have ledgers that use cost-of-sales accounting, business areas, and profit center update scenarios, the segment characteristic is not updated.

If you want to create a new ledger with the profit center update scenario, you do not have to do anything. This new ledger can use the data automatically. If the ledger contains the segment reporting scenario, however, you rebuild the data because the segment has not been updated.

You can transfer both actual and planning data for each CO area, fiscal year, and object type (such as cost center).

You can use transaction `FAGLSKF` to enter actual values for statistical key figures directly in Financial Accounting (FI). However, we recommend that you transfer the values for the statistical key figures from CO first and then adjust them in FI. You can enter plan values for statistical key figures directly in FI with transaction `FAGLSKF1`.

The transactions are located under the following menu path:

On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Statistical Key Figures*.

A period evaluation is also available. You can use statistical key figures as the allocation base in the new General Ledger Accounting.

Allocation

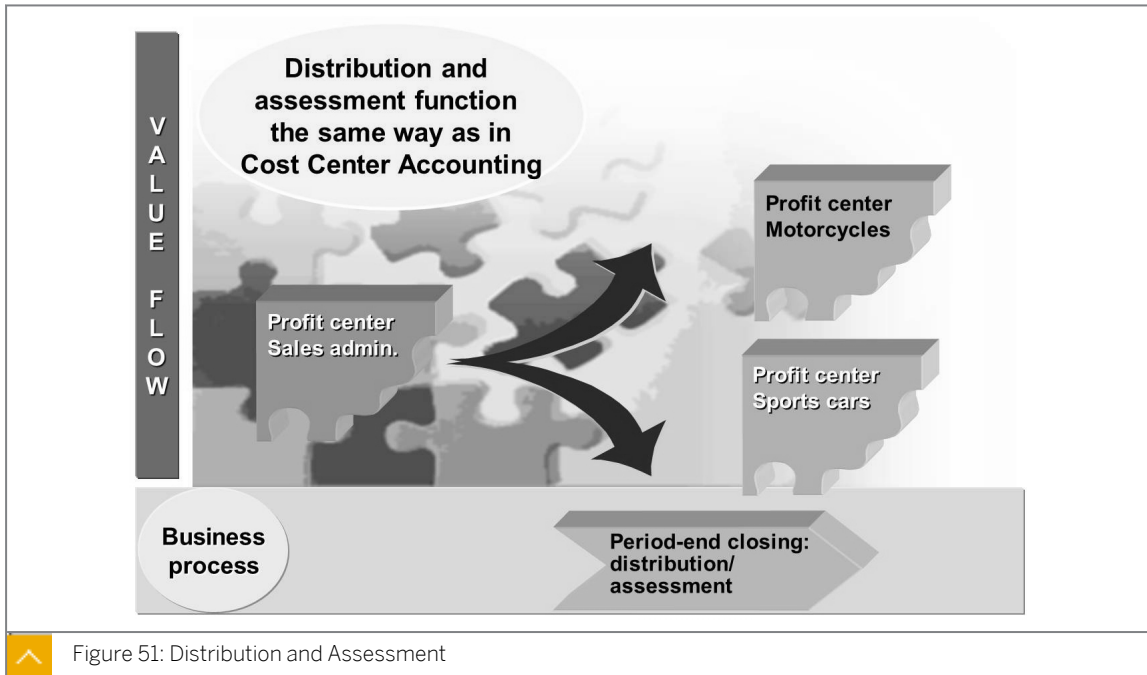


Figure 51: Distribution and Assessment

Allocation (assessment and distribution) of overhead costs is performed at period closing. Allocation is normally performed directly at cost center level. The postings are transferred to the profit centers in new General Ledger Accounting through real-time integration.

If postings were made to the dummy or default profit centers, you allocate them to the production profit centers as assessments during period-end closing. The system uses an assessment account to consolidate the individual accounts in the sender profit center for assessment. This means the head of the receiver profit center now only sees the assessment account and no longer the individual accounts that were posted to the default profit center.

In many cases, you allocate certain balance sheet items (raw materials, real estate, and so on), which you initially posted to a single profit center, to several receiver profit centers. We recommend that you use distribution because it allocates items specifically to the cost element. This means a material stock account remains with the receiver.

Assessing or distributing data in PCA is only beneficial after you have completed all the period closing activities in all the feeder applications (FI, CO, Sales and Distribution, Materials Management, and so on). You should also post any additional profit center data, such as PCA statistical key figures, manually or transfer them from CO before allocating items.



Caution:
Profit center distribution and assessment in new General Ledger Accounting (new G/L) work the same way as in Overhead Management, but affect FI postings only.



Hint:

The (actual) allocations from the different components in the SAP system with active new G/L are integrated with FI as follows:

- Actual allocations in Overhead Cost Controlling: Profit center changes are also updated in new G/L if real-time CO → FI integration is active.
- Actual allocations from classic Profit Center Accounting (EC-PCA): No update in FI – a pure EC-PCA document is generated.
- Actual allocations in new G/L: No integration with other components – a pure FI document is generated.

Creation of Distribution and Assessment

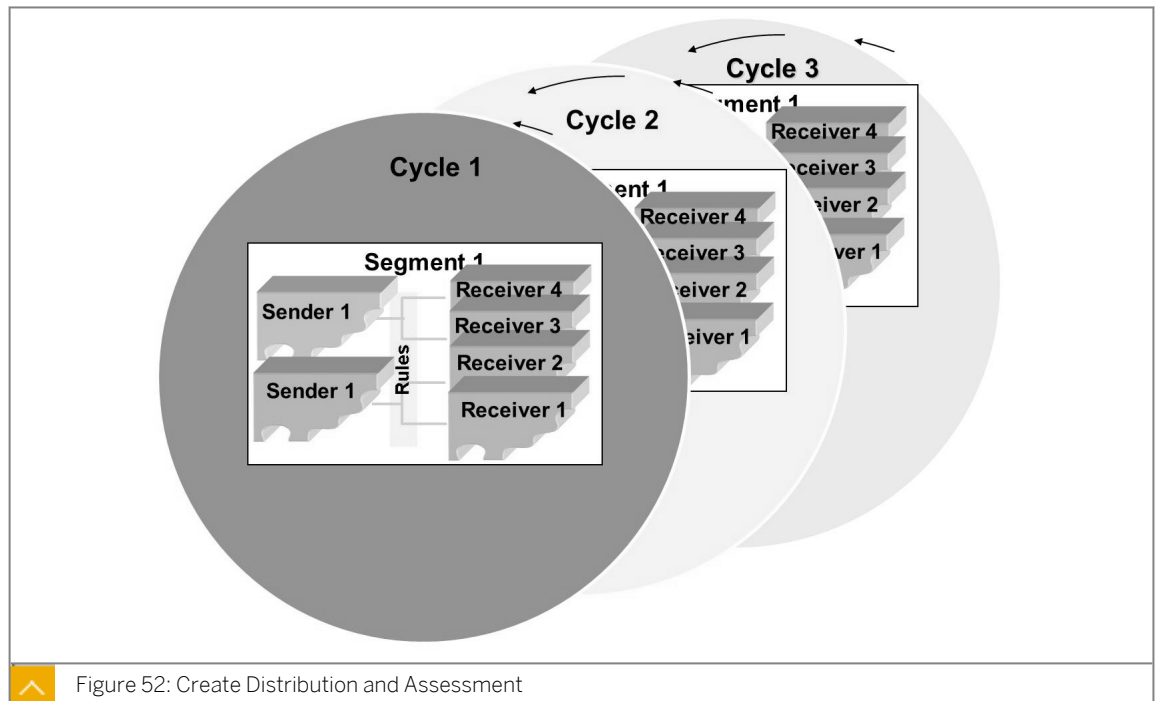


Figure 52: Create Distribution and Assessment

The cycle segment method described here defines both distributions and assessments. Periodic reposting is not used in new G/L. To display the allocation relationships between the senders and receivers in the system, you make entries for each (allocation) segment.

Each segment has the following entries:

- Sender values

Which costs do you want to assess and from which objects will the costs be assessed? Sender values can be posted values, fixed amounts, or fixed prices. If you use posted amounts, you can work with plan and actual values. You can specify a percentage under 100%, which leaves a corresponding amount on the sender profit center.

- Receiver values

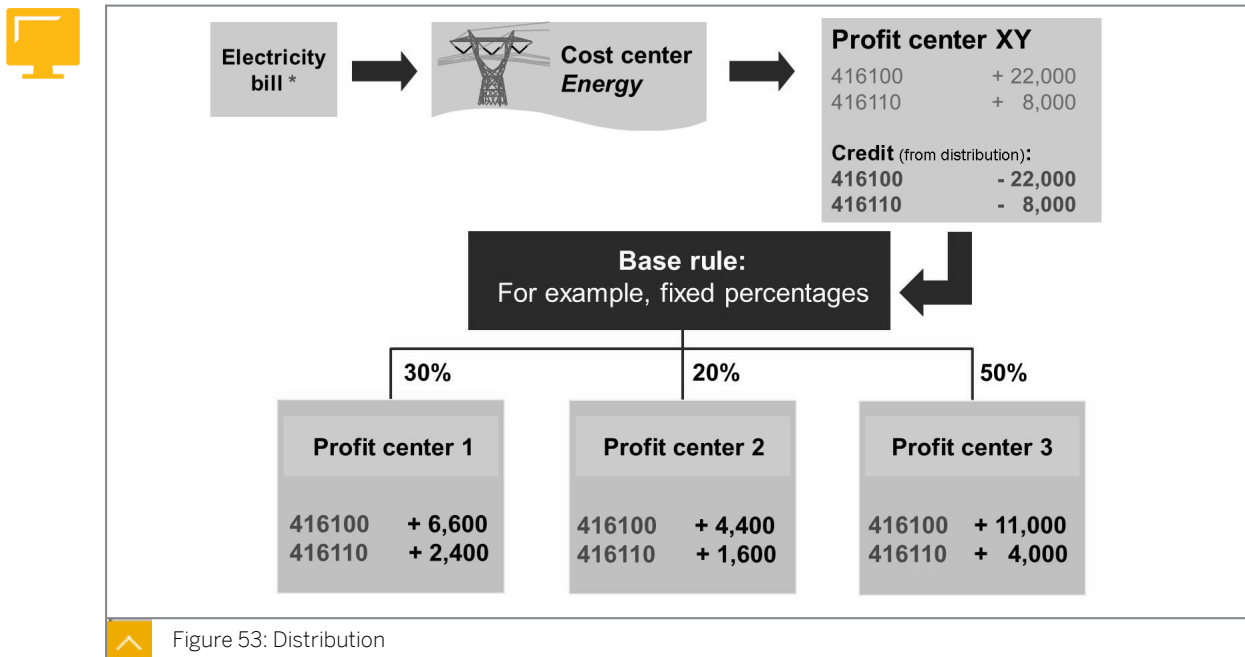
Costs are allocated to which objects? On the receiver side, you can store fixed amounts, fixed percentages, fixed portions, and variable portions as rules.

- Tracing factor

On what basis are the costs split among the receivers? The tracing factor of the variable portion identifies a posted value on the profit center as an allocation base (for example, statistical key figures).

In an allocation segment, sender profit centers are combined with receiver profit centers according to the allocation relationships as described in the allocation segment. Multiple segments are combined in a cycle and a cycle must always be assigned to a version. You use version 1 in FI.

Distribution



Distribution is used to distribute values from one profit center to another. The allocation in FI does not change the debit to the energy cost center at all. The values arrive in the receiving profit centers with the same account (which is usually, but not necessarily, also defined as a cost element in CO) in which they were originally posted on the sender profit center; processing uses the original account. In our example, the accounts are 416100 and 416110.



Hint:
Distribution only creates an FI document.

The FI document number is displayed in the basic list of the allocation. You can reverse distributions as often as required.

You use the cycle segment method to define sender-receiver relationships.

Practical example: Distribution is used to distribute material stocks to different profit centers. This is necessary when several profit centers at a plant are responsible for a material. Since only one profit center can be defined in the material master, you allocate the stock values (using the stock account) from the defined profit center to the others.

**Caution:**

In the standard system, distributing open item-managed accounts or reconciliation accounts is not recommended. To allocate such accounts, use assessments.

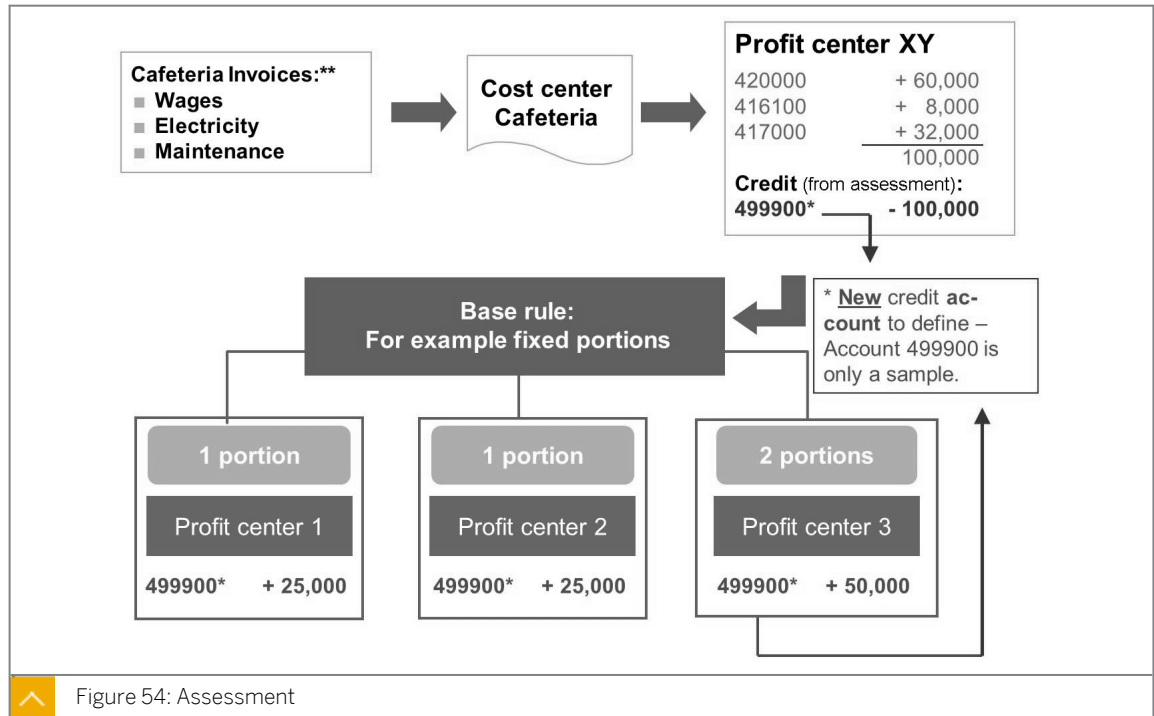
Assessment

Figure 54: Assessment

You use the assessment when the original accounts cannot or must not be identified on the receiver side. In practice, assessment is often used to clear a dummy profit center. In the assessment cycle, a temporary assessment cost element is used to distribute the costs from the source to the target. You want an individual assessment account to be defined in each case for the assessment in new G/L. This is account 499900 in the example shown in the figure.

**Hint:**

The assessment account must not correspond to any secondary cost element in CO. This means that you cannot simply use the assessment cost elements (cost element type 42) from CO.

The receiving objects do not display the account with which the original invoices were entered. You use the assessment when the original accounts cannot or must not be identified on the receiver side. In practice, assessment is often used to clear a dummy profit center. Distribution creates an FI document. You can reverse and repeat assessments as often as required. You use the cycle segment method to define sender-receiver relationships.



How to Process a Profit Center Allocation

Define an assessment account **4990##** for profit centers. Use account 499998 as a template. Define an assessment in new G/L to allocate the administration costs to the pump division's profit center. Run the actual assessment cycle in the current period. Analyze the effects of the assessment in reporting.

1. Define an assessment account 4990##, for profit centers. Use account 499998 as a template.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *G/L Accounts* → *Individual Processing* → *Centrally* (FS00).

- b) On the *Edit G/L Account Centrally* screen, enter the following data:

Field	Value
G/L Account	4990##
Company Code	1000

- c) Choose the *With Template* pushbutton.

- d) In the *Reference Account* dialog box, enter account **499998** and company code **1000**. Next, choose *Continue*.

- e) On the *Create G/L Account centrally* screen, name the account **Allocation PC ##** as short text and **Allocation Profit Center ##** as G/L account long text.

- f) Choose the *Control Data* tab page and delete the alternative account number.

- g) Choose the *Key Word/Translation* tab page and name the account **Umlage PC ##** as short text and **Umlage Profitcenter ##** as G/L account long text in German.

- h) Do not exit the screen.

2. Assign financial statement version INT to the new account.

- a) Choose the *Edit financial statement version* pushbutton. Confirm the message box that appears.

- b) In the *Select Financial Statement Version* dialog box, enter **INT** in the *Fin. Stmt version* field and choose *Continue*.

- c) On the *Change Financial Statement Version* dialog box, expand item nodes 3000000 → 3050000 → 3051000.

- d) Click 3051090 and then choose the *Assign Accounts* pushbutton.

- e) In the *Change Accounts* dialog box, choose the *Next Page* pushbutton to scroll to an available line.

- f) Enter account **4990##** and then choose *Continue*.

- g) Save your entries.

- h) Return to the *SAP Easy Access* screen.

3. Define an assessment in new G/L to allocate the administration costs to the pump division's profit center.

Use the following parameters:

Field Name or Data Type	Value
<i>Ledger</i>	0L
<i>Cycle</i>	ADMIN##
<i>Start Date</i>	January 1, current fiscal year

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Periodic Processing* → *Closing* → *Allocation* → *Actual Assessment* → *Create*.
- b) On the *G/L: Create Actual Assessment Cycle: Initial Screen*, enter the data provided in the exercise step and press ENTER.
- c) On the *G/L: Create Actual Assessment Cycle: Header Data*, enter the following data:

Field Name or Data Type	Value
<i>Text</i>	Administrative Costs Pumps ##
<i>Company Code</i>	1000
<i>Version</i>	1

- d) Choose the *Attach segment* pushbutton to add a segment named **ADMIN##** (administrative costs, pump division).
- e) On the *G/L: Create Actual Assessment Cycle: Segment* screen, enter the following data:

Field Name or Data Type	Value
<i>Segment Name</i>	ADMIN01
<i>Assessment Acco</i>	4990##
<i>Sender rule</i>	Posted Amount
<i>Share in %</i>	100%
<i>Actual value origin</i>	Select
<i>Receiver rule</i>	Fixed percentages

- f) Choose the *Senders/Receivers* tab page and enter the following data:

Field Name or Data Type	Value
<i>Account Number Set</i>	ALLOC##
<i>Sender Profit Center</i>	611##
<i>Receiver Profit Center</i>	612##



Hint:

If account intervals and single values are not sufficient to define the sender values, you can enter the name of a set in the *Set* column and choose *Extras/Create Set* to create a new one. You have been asked to group the master data together. You define the relevant accounts within the intervals 400000 – 479999 and 200000 – 299999 to allocate the P&L statement.

- g) Click in the *ALLOC##* field and choose *Extras → Create set*.
- h) On the *Create Set: Values* screen, enter the following values and save the set:

Field Name or Data Type	Value
<i>Basic set</i>	P&L-relevant accounts
<i>Fields for 1st interval</i>	400000 - 499999
<i>Fields for 2nd interval</i>	200000 - 299999

- i) Choose the *Receiver Tracing Factor* tab page and enter **100** in *Portion/percent* field.
4. Create a cycle run group called **GR## (Parallel assessments)** and assign it to the cycle.
- a) Choose *Goto → Cycle run group*.
- b) In the *Determine Cycle Run Group* dialog box, choose the *Create group* pushbutton (white piece of paper).
- c) In the *Create Cycle Run Group* dialog box, enter **GR##** as cycle run group name and **Parallel Assessments** as its description.
- d) Choose *Confirm* twice.
- e) Save the cycle and exit.
5. Run the actual assessment cycle **ADMIN##** in ledger *OL* in the current period of the current fiscal year and analyze the log. Use document type *SA*.
- a) On the *SAP Easy Access* screen, choose *Accounting → Financial Accounting → General Ledger → Periodic Processing → Closing → Allocation → Actual Assessment → Execute (FAGLGA15)*.

- b) On the *Execute Actual Assessment: Initial* Screen, enter the following data:

Field Name or Data Type	Value
<i>Period</i>	1 to 12
<i>Fiscal Year</i>	Current fiscal year
<i>Document Type</i>	SA
<i>Cycle</i>	ADMIN##
<i>Start Date</i>	January 1, current fiscal year

- c) Choose the *Execute* pushbutton.
- d) On the *Display Actual Assessment: General Ledger Basic List* screen, analyze the log.
6. Analyze the effects of the assessment in reporting.

Go to the information system for the new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following parameters:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	1
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	612##

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Grp: Plan/Actual/Variance* screen, enter the data provided in the exercise step.
- c) On the *Execute Profit Center Grp: Plan/Actual/Variance: Overview* screen, you can see that the costs are posted under the assessment account.
Analyze the values posted to the P&L statement from profit centers 611## and 612## as a result of the assessment.

Unit 3

Exercise 8



Process a Profit Centers Allocation

Define an assessment account **4990##** for profit centers. Use account 499998 as a template. Define an assessment in new G/L to allocate the administration costs to the pump division's profit center. Run the actual assessment cycle in the current period. Analyze the effects of the assessment in reporting.

1. Define an assessment account 4990##, for profit centers. Use account 499998 as a template.
2. Assign financial statement version INT to the new account.
3. Define an assessment in new G/L to allocate the administration costs to the pump division's profit center.

Use the following parameters:

Field Name or Data Type	Value
<i>Ledger</i>	0L
<i>Cycle</i>	ADMIN##
<i>Start Date</i>	January 1, current fiscal year

4. Create a cycle run group called **GR## (Parallel assessments)** and assign it to the cycle.
5. Run the actual assessment cycle **ADMIN##** in ledger *0L* in the current period of the current fiscal year and analyze the log. Use document type SA.
6. Analyze the effects of the assessment in reporting.

Go to the information system for the new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following parameters:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	1
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12

Field Name or Data Type	Value
<i>Profit Center</i>	612##



Process a Profit Centers Allocation

Define an assessment account **4990##** for profit centers. Use account 499998 as a template. Define an assessment in new G/L to allocate the administration costs to the pump division's profit center. Run the actual assessment cycle in the current period. Analyze the effects of the assessment in reporting.

1. Define an assessment account 4990##, for profit centers. Use account 499998 as a template.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Master Records* → *G/L Accounts* → *Individual Processing* → *Centrally* (FS00).

- b) On the *Edit G/L Account Centrally* screen, enter the following data:

Field	Value
<i>G/L Account</i>	4990##
<i>Company Code</i>	1000

- c) Choose the *With Template* pushbutton.
 - d) In the *Reference Account* dialog box, enter account **499998** and company code **1000**. Next, choose *Continue*.
 - e) On the *Create G/L Account centrally* screen, name the account **Allocation PC ##** as short text and **Allocation Profit Center ##** as G/L account long text.
 - f) Choose the *Control Data* tab page and delete the alternative account number.
 - g) Choose the *Key Word/Translation* tab page and name the account **Umlage PC ##** as short text and **Umlage Profitcenter ##** as G/L account long text in German.
 - h) Do not exit the screen.
 2. Assign financial statement version INT to the new account.
 - a) Choose the *Edit financial statement version* pushbutton. Confirm the message box that appears.
 - b) In the *Select Financial Statement Version* dialog box, enter **INT** in the *Fin. Stmt version* field and choose *Continue*.
 - c) On the *Change Financial Statement Version* dialog box, expand item nodes 3000000 → 3050000 → 3051000.
 - d) Click 3051090 and then choose the *Assign Accounts* pushbutton.

- e) In the *Change Accounts* dialog box, choose the *Next Page* pushbutton to scroll to an available line.
 - f) Enter account **4990##** and then choose *Continue*.
 - g) Save your entries.
 - h) Return to the *SAP Easy Access* screen.
3. Define an assessment in new G/L to allocate the administration costs to the pump division's profit center.

Use the following parameters:

Field Name or Data Type	Value
<i>Ledger</i>	0L
<i>Cycle</i>	ADMIN##
<i>Start Date</i>	January 1, current fiscal year

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Periodic Processing* → *Closing* → *Allocation* → *Actual Assessment* → *Create*.
- b) On the *G/L: Create Actual Assessment Cycle: Initial Screen*, enter the data provided in the exercise step and press ENTER.
- c) On the *G/L: Create Actual Assessment Cycle: Header Data*, enter the following data:

Field Name or Data Type	Value
<i>Text</i>	Administrative Costs Pumps ##
<i>Company Code</i>	1000
<i>Version</i>	1

- d) Choose the *Attach segment* pushbutton to add a segment named **ADMIN##** (administrative costs, pump division).
- e) On the *G/L: Create Actual Assessment Cycle: Segment* screen, enter the following data:

Field Name or Data Type	Value
<i>Segment Name</i>	ADMIN01
<i>Assessment Acco</i>	4990##
<i>Sender rule</i>	Posted Amount
<i>Share in %</i>	100%
<i>Actual value origin</i>	Select
<i>Receiver rule</i>	Fixed percentages

- f) Choose the *Senders/Receivers* tab page and enter the following data:

Field Name or Data Type	Value
<i>Account Number Set</i>	ALLOC##
<i>Sender Profit Center</i>	611##
<i>Receiver Profit Center</i>	612##



Hint:

If account intervals and single values are not sufficient to define the sender values, you can enter the name of a set in the *Set* column and choose *Extras/Create Set* to create a new one. You have been asked to group the master data together. You define the relevant accounts within the intervals 400000 – 479999 and 200000 – 299999 to allocate the P&L statement.

- g) Click in the *ALLOC##* field and choose *Extras → Create set*.
- h) On the *Create Set: Values* screen, enter the following values and save the set:

Field Name or Data Type	Value
<i>Basic set</i>	P&L-relevant accounts
<i>Fields for 1st interval</i>	400000 - 499999
<i>Fields for 2nd interval</i>	200000 - 299999

- i) Choose the *Receiver Tracing Factor* tab page and enter **100** in *Portion/percent* field.
4. Create a cycle run group called **GR## (Parallel assessments)** and assign it to the cycle.
- a) Choose *Goto → Cycle run group*.
- b) In the *Determine Cycle Run Group* dialog box, choose the *Create group* pushbutton (white piece of paper).
- c) In the *Create Cycle Run Group* dialog box, enter **GR##** as cycle run group name and **Parallel Assessments** as its description.
- d) Choose *Confirm* twice.
- e) Save the cycle and exit.
5. Run the actual assessment cycle **ADMIN##** in ledger *OL* in the current period of the current fiscal year and analyze the log. Use document type *SA*.
- a) On the *SAP Easy Access* screen, choose *Accounting → Financial Accounting → General Ledger → Periodic Processing → Closing → Allocation → Actual Assessment → Execute (FAGLGA15)*.
- b) On the *Execute Actual Assessment: Initial* Screen, enter the following data:

Field Name or Data Type	Value
<i>Period</i>	1 to 12

Field Name or Data Type	Value
<i>Fiscal Year</i>	Current fiscal year
<i>Document Type</i>	SA
<i>Cycle</i>	ADMIN##
<i>Start Date</i>	January 1, current fiscal year

- c) Choose the *Execute* pushbutton.
- d) On the *Display Actual Assessment: General Ledger Basic List* screen, analyze the log.
6. Analyze the effects of the assessment in reporting.

Go to the information system for the new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following parameters:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	1
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	612##

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Grp: Plan/Actual/Variance* screen, enter the data provided in the exercise step.
- c) On the *Execute Profit Center Grp: Plan/Actual/Variance: Overview* screen, you can see that the costs are posted under the assessment account.
Analyze the values posted to the P&L statement from profit centers *611##* and *612##* as a result of the assessment.



LESSON SUMMARY

You should now be able to:

- Define and execute a profit center allocation



Learning Assessment

1. Reconciliation is _____ between the general ledger and Profit Center Accounting.

Choose the correct answer.

- A required
- B not required
- C not applicable

2. The segment and profit center can be defined directly in the asset master record.

Determine whether this statement is true or false.

- True
- False

3. When you post a purchase order, the system posts the goods usage immediately upon goods receipt, if the purchase order has _____.

Choose the correct answer.

- A a clearing account
- B an account assignment
- C a goods account

4. Account determination takes place when the documents are transferred from Controlling to _____ within the real-time integration framework.

Choose the correct answer.

- A Cost Object Controlling
- B new General Ledger Accounting
- C Profit Center Accounting

5. If account-based profitability analysis is active in your system, the general ledger account for changes in stock must be defined as a _____.

Choose the correct answer.

- A cost element
- B profit and loss account
- C balance sheet account
- D revenue element

6. Allocation (assessment and distribution) of overhead costs is performed directly at profit center level.

Determine whether this statement is true or false.

- True
- False



Learning Assessment - Answers

1. Reconciliation is _____ between the general ledger and Profit Center Accounting.

Choose the correct answer.

- A required
- B not required
- C not applicable

2. The segment and profit center can be defined directly in the asset master record.

Determine whether this statement is true or false.

- True
- False

3. When you post a purchase order, the system posts the goods usage immediately upon goods receipt, if the purchase order has _____.

Choose the correct answer.

- A a clearing account
- B an account assignment
- C a goods account

4. Account determination takes place when the documents are transferred from Controlling to _____ within the real-time integration framework.

Choose the correct answer.

- A Cost Object Controlling
- B new General Ledger Accounting
- C Profit Center Accounting

5. If account-based profitability analysis is active in your system, the general ledger account for changes in stock must be defined as a _____.

Choose the correct answer.

- A cost element
 B profit and loss account
 C balance sheet account
 D revenue element

6. Allocation (assessment and distribution) of overhead costs is performed directly at profit center level.

Determine whether this statement is true or false.

- True
 False

Lesson 1

Demonstrating Profit Center Reorganization

154

Lesson 2

Processing a Profit Center Reorganization

167



UNIT OBJECTIVES

- Outline the basics of profit center reorganization
- Create a reorganization plan



Demonstrating Profit Center Reorganization

LESSON OVERVIEW

This lesson helps you to understand the concept and the process of reorganizing profit centers. Profit center reorganization is the single point of entry for defining, triggering, monitoring, and reporting the change of a profit center assignment to other SAP objects.

Business Example

It is important to be able to break down a management decision about the aim of a reorganization into a well-defined reorganization plan. This involves aligning all the related parties, identifying their special responsibilities, and initiating and monitoring all the necessary activities. At the end, the reorganization of profit centers also provides a database for the audit trail. For this reason, you require the following knowledge:

- An understanding of how to outline the basics of profit center reorganization



Demonstration proposal:

All the data you require is displayed in the figure or in the text beneath the figure. Reproduce the data and explain the figures showing references in the system.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

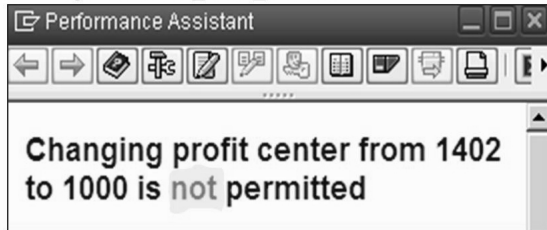
- Outline the basics of profit center reorganization

Basics of Profit Center Reorganization



Try to **change the profit center in a cost center master record** (with debits), in a release **less than SAP ERP 6.05**, with **activated new G/L** and assigned *Profit Center Update* scenario.

Message no. FAGL_ORG_UNITS011:



Why is the change rejected (in standard): It is not permitted because transaction data already exists for the account assignment object. Changing the profit center in this instance can lead to **inconsistencies** in FI.



In Customizing, the displayed error message can be changed to a warning message. Afterwards a profit center change is possible but there will be **no** automatic correction posting.

Figure 55: Change of a Profit Center in Another SAP Object

The long text of the message displayed without activated business function FIN_GL_REORG_1 looks as follows:

Changing profit center from 1402 to 1000 is not permitted (Message no. FAGL_ORG_UNITS011)

Diagnosis: You want to change the profit center from 1402 to 1000. However, this change is not permitted because transaction data already exists for the account assignment object. Changing the profit center in this instance can lead to inconsistencies in Financial Accounting (FI).

Example: There are costs on a cost center to which profit center A is assigned. If the profit center in the cost center master record is now changed to B and the costs then distributed to other cost centers, the currently assigned profit center, that is, profit center B would be credited. Profit center A, however, would still have a debit posting.

System Response: The action is terminated.



Note:

If new General Ledger Accounting (new G/L) is not activated, or if you do not use the new G/L scenario FIN_PCA (Profit Center Update), the profit center can be changed in the cost center master record. See also SAP Notes 1057674 and 1358080.

Change of a Profit Center in Another SAP Object



Try the **same change**, for example, in cost center 1000, in the SAP ERP 6.05 training system of this course.


Message no. FAGL_REORGANIZATION601:

Since the change in profit center assignment from profit center 1402 to profit center 1000 on the key date is not contained in a reorganization plan for profit centers, a change in cost center is **not permitted** either.



Conclusion: A profit center change (a reorganization) is now possible!

Precondition for the system message:

- Active business function  **FIN_GL_REORG_1**
- Active reorganization plan type 001 (Profit Center)

Activate Reorganization Plan Type			
Plan Type	Description	Plan Type Is Active	
001	Profit Center	<input checked="" type="checkbox"/>	



Figure 56: Change of a Profit Center in Another SAP Object II

The business functions can be displayed and activated in transaction code `SEW5`. The description of business function `FIN_GL_REORG_1` is FI-GL (New), Profit Center Reorganization, and Segment Reports.

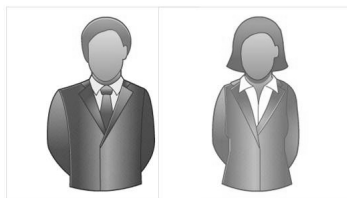


Hint: Business function `FIN_GL_REORG_1` is available with Enhancement Package 5 (EHP5).

Management Decisions – Shift Responsibilities



■ **Initial decisions:**



Executive Board

Management decides to shift responsibilities.

Example:

- A new profit center needs to be created.
- Existing profit center A will be divided into two profit centers:

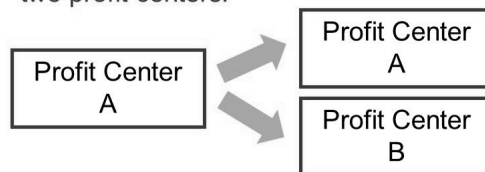


Figure 57: Starting Point

Major effects of management decision:

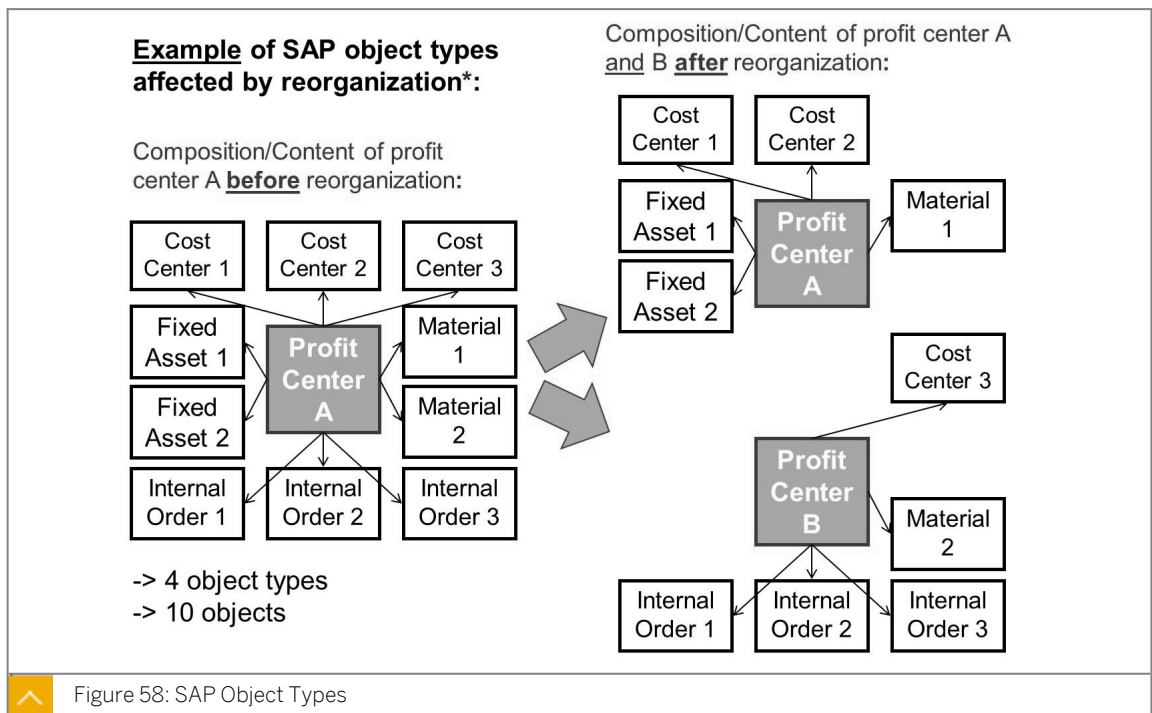
- For cost centers, internal orders, fixed assets, payables, and many more SAP objects, you must decide if they will remain assigned to the existing profit center A or if they should be shifted to profit center B. Thus that decision means that the entire content or composition of a profit center will change.
- The decision is not only settled by changing the profit center hierarchy or the master data of the affected profit centers.

The following are the general aspects of profit center reorganization:

- Profit center reorganization only applies to new G/L, not classic General Ledger Accounting, classic Profit Center Accounting (EC-PCA), or special purpose ledgers (FI-SL).
- In new G/L, you have to assign the *Profit Center Update* scenario (FIN_PCA) to a ledger.
- Reorganization postings are performed cumulatively at general ledger level.

Exception: Only in Asset Accounting are the reorganization postings of profit centers posted on the level of a single asset.

SAP Object Types



As shown in the figure, it is not enough to change the profit center hierarchy. Profit center reorganization typically affects various SAP object types, as the profit center can be assigned to many of them. The combination, composition, and dependences of all the SAP object types in the context of the reorganization of profit centers is summarized in the derivation hierarchy. The assignment of the profit center in all objects of the derivation hierarchy has to be changed.

The profit center reorganization functions enable you to execute the changes.

Derivation Hierarchy

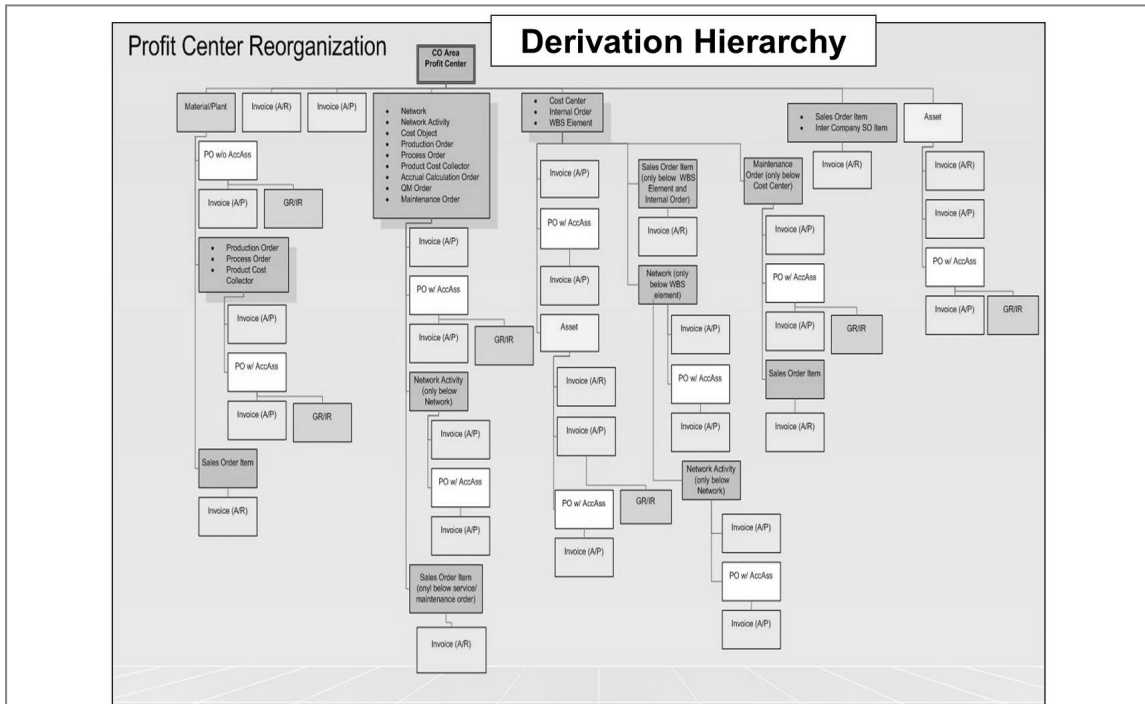


Figure 59: Derivation Hierarchy

The derivation hierarchy is an overview of all the SAP object types that are involved in a profit center reorganization. It contains objects that have a profit center assigned to them directly in the master data – see the top line of the hierarchy.

It also contains objects from which the profit center is derived – see the levels below the top line.

Objects of object types on the top line are referred to as first level objects.



Caution:

The displayed derivation hierarchy explains the standard ways to derive profit centers in the SAP system. The derivation can also work in other ways in an SAP customer system.

SAP Definition of the Derivation Hierarchy

Derivation hierarchy is a hierarchy of object types that need to be reorganized entirely. This hierarchy shows the dependencies of these object types in terms of their content. It describes how the profit center is determined when an object of an object type is created.

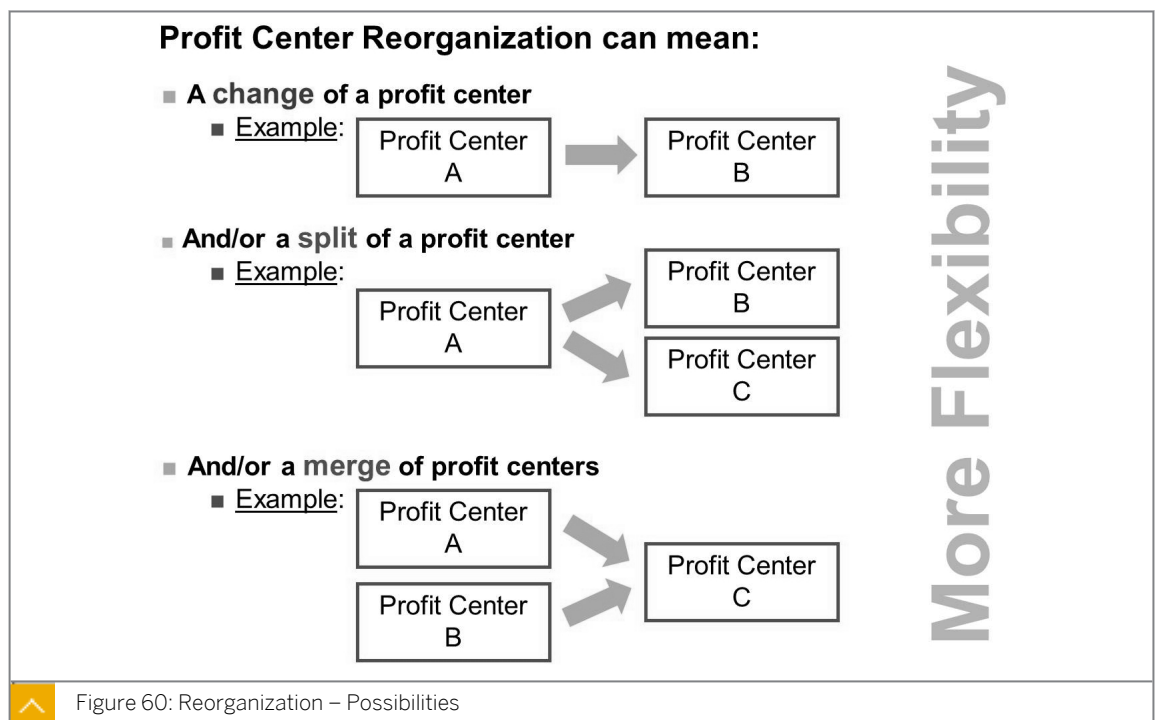
Based on the object types, transactions in General Ledger Accounting are posted to the profit centers that need to be corrected by the reorganization.

The following object types appear on the top line of the hierarchy:

- Material/Plant
- Payable -> Invoice (AR)

- Receivable -> Invoice (AP)
- Network
- Network Activity
- Cost Object
- Production Order
- Process Order
- Product Cost Collector
- Accrual Calculation Order
- QM Order
- Maintenance Order
- Internal Order
- Cost Center
- WBS Element
- Sales Order
- Fixed Asset

Reorganization – Possibilities



Another way to split a profit center is to divide profit center A into two, profit center A and B.



Hint:

A complete closeout of a profit center is not supported. You must verify by organizational means that old profit centers are not posted anymore. A process model for expiring profit centers has to be established to cover these cases.

Features of SAP ERP Before and After 6.0 EHP5

The differences in the features of SAP ERP before and after 6.0 EHP5 are as follows:

- Before SAP ERP 6.0 EHP5:
 - There are limitations in organizational flexibility for management reporting.
Changes in the structure of a profit center cannot be thoroughly reflected by a change of profit center assignments in relevant objects from a certain key date.
 - Management reporting entities are included in the general ledger. This includes restrictions in the rebuilding of ledgers based on the changed settings, for example.
- Since SAP ERP 6.0 EHP5:
 - There is more flexibility in the area of management reporting.
 - A function is now available for profit center reorganization: Business function FIN_GL_REORG_1 (FI-GL (New), Profit Center Reorganization and Segment Reports).

Business Challenges and Values of Reorganization

The business challenges of reorganization are as follows:

- Break down a management decision about the aim of a reorganization into a well defined reorganization plan.
- Align all related parties, identify their specific responsibilities, initiate, and monitor all necessary activities.
- Maintain consistency during organizational changes. Continuation of processes across changed organizational assignments.
- Provide a database for the audit trail.

The business value of reorganization is as follows:

- Single point of entry for defining, triggering, monitoring, and reporting on a reorganization plan
- Defined timeline and responsibilities – the reorganization manager and object list owner role
- Transparency of profit center derivation in ERP
- Consistency in balance sheet reporting
- Audit trail

Simplified System Example



The following system example examines only a few object types affected by a reorganization of profit centers. It is **NOT** possible to explain all object types within the course in detail.

This system example is intended to provide a high level perspective of reorganization.

The example explains a split of a profit center:

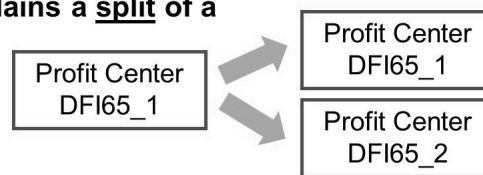


Figure 61: Simplified System Example

The following items are currently out of scope of the reorganization of profit centers:

- Reposting of profit and loss accounts
- Reposting of balance sheet accounts without open item management, except balance sheet accounts for fixed assets and material management accounts (Open items of receivables and payables are reposted if document splitting is activated)
- G/L accounts with open item management, except the GR/IR account if document splitting is activated
- Restatement (historical reporting under the new entity assignment)
- Commitments
- Real estate objects
- Accrual objects of the accrual engine
- Contract Accounting (FI-CA and profit center for receivables)
- Plan data (planning integration and manual entries)
- Sales documents with revenue recognition
- ALE scenarios



Note:

Supplier Relationship Management (SRM) orders and Customer Relationship Management (CRM) contracts are not subject to reorganization as they do not contain a profit center assignment. Also HR objects do not have a profit center assignment.

Framework for Simplified System Example



Framework for a simplified system example of profit center reorganization:

■ **Used system data:**

- Existing cost center DFI65 (in controlling area 1000) with displayed basic data:

Hierarchy area	H-DFI65	DFI65
Company Code	AA00	IDES AC305 Gr. 00
Business Area	9900	Corporate Other
Functional Area	0400	Administration
Currency	EUR	
Profit Center	DFI65_1	DFI65_1

■ Profit center DFI65_1 is also assigned to **three existing internal orders** – see transaction KO04:

- Internal order 100339
- Internal order 100340
- Internal order 100341

Figure 62: Framework for Simplified System Example



Hint:

In the figure, you should post the asset acquisition in January of the current year. If you do so, the example works, no matter in which month of the year the course takes place. Of course, You can also create the posting in the period prior to the current period, for example.

First example: The current date is June. Therefore, you assume in the course that the actual period is May and then do the posting (asset acquisition) in May. The reorganization date (see later) will then be June 1st, a date in the future, as we assume it is May.

Second example: The current date is October. Therefore, you assume in the course that the actual period is September and then do the posting (asset acquisition) in September. The reorganization date (see later) will then be October 1st, a date in the future, as we assume it is September.

Example of profit center reorganization

Create at least one fixed asset (transaction code AS01) and post (integrated asset acquisition) with transaction F-90 * using the following data:

Field Name or Data Type	Values
Asset class	2100
Company code	AA00
Cost center	DFI65 (=> profit center and segment will be derived and displayed in the asset master data)
Document and posting date	In January of current year
Vendor	30500
Acquisition value	€ 12,000 (net)

Further recommended posting that makes things easier to understand: Asset acquisition to an asset with cost center DF165 and internal order 100341. Use same asset class, company code, posting dates, and vendor.



How to Activate the Business Function for Profit Center Reorganization

Activate the business function for profit center reorganization.

1. Activate the reorganization plan type.
 - a) Activate the reorganization plan type in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Reorganization → Basic Settings → Activate Reorganization Plan Type*.
 - b) On the *Change View "Activate Reorganization Plan Type": Overview* screen, select plant type 001 and return to the *Customizing* screen.
2. Activate segment reporting.
 - a) Activate segment reporting in *Customizing for Financial Accounting (New)* under *Asset Accounting → Integration with General Ledger Accounting → Segment Reporting → Activate Segment Reporting*.
 - b) On the *Change View "Activate Segment Reporting": Details* screen, select *Segment Reptng Active* and return to the *Customizing* screen.
 - c) Specify the account assignment types for account assignment objects in *Customizing for Financial Accounting (New)* under *Asset Accounting → Integration with General Ledger Accounting → Additional Account Assignment objects → Specify Account Assignment Types for Account Assignment Objects*.
 - d) On the *Display View "Company Code": Overview* screen, choose *Company Code AA##* and double-click *Depreciation Area*.
 - e) On the *Display View "Depreciation Area": Overview* screen, choose *Area 1* and double-click *Account Assignment Objects*.
 - f) On the *Change View "Account Assignment Objects": Overview* screen, check whether the *Acct Assgnt* checkbox is selected.
 - g) Return to the *Display View "Depreciation Area": Overview* screen.



How to Try to Change the Profit Center in a Cost Center

1. Save a profit center in the cost center master data.
 - a) On the *SAP Easy Access* screen, choose *Accounting → Controlling → Cost Center Accounting → Master Data → Cost Center → Individual Processing → Change (KS02)*.
 - b) On *Change Cost Center: Initial Screen*, enter **DFI65** in the *Cost Center* field and choose *Continue*.
 - c) On *Change Cost Centers: Basic Screen*, enter **DFI65_1** in the *Profit Center* field.
2. Post a vendor invoice.

- a) On the *SAP Easy Access* screen, choose *Accounting → Financial Accounting → Accounts Payable → Document Entry → Invoice (FB60)*.
- b) On the *Enter Vendor Invoice: Company Code AA00* screen, enter the following data:

Field Name or Data Type	Value
<i>Vendor</i>	Invoice number
<i>Invoice Date</i>	Today's date
<i>Posting Date</i>	Today's date
<i>Amount</i>	110000
<i>G/L acct</i>	470000
<i>D/C</i>	<i>Debit</i>

- c) Choose the *Simulate* pushbutton.
 - d) On the *Document Overview* screen, go back to the *Enter Vendor Invoice: Company Code AA00* screen, and choose *Document → Simulate General Ledger*.
 - e) Post your invoice and exit the function.
3. Try to change the profit center assignment in the cost center master data after transaction data is posted.
- a) On the *SAP Easy Access* screen, choose *Accounting → Controlling → Cost Center Accounting → Master Data → Cost Center → Individual Processing → Change (KS02)*.
 - b) On *Change Cost Center: Initial Screen*, enter **DFI65** in the *Cost Center* field and choose *Continue*.
 - c) On *Change Cost Centers: Basic Screen*, enter **DFI65_2** in the *Profit Center* field.
 - d) Save your entries.
 - e) In the *Performance Assistant* dialog box, the system displays the error message *Profit center assignment in cost center DFI65 cannot be changed*.
 - f) Return to *Change Cost Centers: Basic Screen*.



How to Verify the Profit Center in Internal Orders

1. Verify the profit center in the internal orders.
 - a) On the *SAP Easy Access* screen, choose *Accounting → Controlling → Internal Orders → Master Data → Special Functions → Order → Change (KO02)*.
 - b) On *Change Internal Order: Initial Screen*, enter your order number in the *Order* field and choose *Continue*.
 - c) On the *Change Internal Order: Master data* screen, verify the profit center.
 - d) Return to *Change Internal Order: Initial Screen* and exit the function.



How to Create and Post an Asset Acquisition

1. Create an asset acquisition.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Field Assets* → *Asset* → *Create* → *Asset (AS01)*.

- b) On *Create Asset: Initial Screen*, enter the following data:

Field Name or Data Type	Value
<i>Asset Class</i>	21##
<i>Company Code</i>	AA##
<i>Number of similar assets</i>	1

- c) Press ENTER.

- d) On the *Time-dependent* tab page, enter the following data:

Field Name or Data Type	Value
<i>Business Area</i>	21##
<i>Cost Center</i>	DFI65
<i>Profit Center</i>	DFI65_1
<i>Segment</i>	CONS

- e) Press ENTER and post your asset.

- f) Exit the function.

2. Post an external acquisition.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Field Assets* → *Posting* → *Acquisition* → *External Acquisition* → *With Vendor (F-90)*.

- b) On the *Acquisition from purchase w. vendor: Header Data* screen, enter the following data:

Field Name or Data Type	Value
<i>Document Date</i>	Today's date
<i>Posting Date</i>	Today's date
<i>Pstky</i>	31
<i>Account</i>	30500

- c) Press ENTER.

- d) On the *Enter Vendor Invoice: Add Vendor Item* screen, enter the following data:

Field Name or Data Type	Value
<i>Amount</i>	Today's date

Field Name or Data Type	Value
<i>Tax Code</i>	<i>01</i>
<i>Pstky</i>	70
<i>Account</i>	2000
<i>TType</i>	100

- e) Press ENTER.
- f) On the *Enter Vendor invoice: Add Asset item* screen, choose *Document* → *Simulate*.
- g) On the *Enter Vendor invoice: Display Overview* screen, choose *Document* → *Simulate General Ledger*.
- h) Go back to the *Enter Vendor invoice: Display Overview* screen and post your invoice.
- i) Return to the *SAP Easy Access* screen.

**LESSON SUMMARY**

You should now be able to:

- Outline the basics of profit center reorganization



Processing a Profit Center Reorganization

LESSON OVERVIEW

This lesson helps you to understand the concept and the process of reorganizing profit centers. Profit center reorganization is the single point of entry for defining, triggering, monitoring, and reporting the change of a profit center assignment to other SAP objects.

Business Example

It is important to be able to break down a management decision about the aim of a reorganization into a well-defined reorganization plan. This involves aligning all related parties, identifying their special responsibilities, and initiating and monitoring all the necessary activities. At the end, the reorganization of profit centers also provides a database for the audit trail. For this reason, you require the following knowledge:

- An understanding of how to create a reorganization plan



Demonstration proposal:

In the system, reproduce as far as possible what is displayed and explained in the figures. All the data you need is displayed either in the graphic or in the text below.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Create a reorganization plan

Preparation for Reorganization



But: The change of the profit center is (now/EHP5) possible only if a reorganization plan, with reorganization date 01.02., exists:



Figure 63: Assumptions



Caution:

In case you decided not to post the asset acquisition in January, but in the prior month, the valid date of the cost center change is the first of the current month. Then the first of the current month is also the reorganization date (see later) and not as described in the figure, February 1st.

Assume that cost center DFI65 has to be changed in the following way:

- Assign new profit center DFI65_2.
 - The new profit center already exists in the training system.
 - The new profit center DFI65_2 is valid from 01.02. of the current year and valid to 31.12.9999.

A cost center is just one of several SAP object types to which a profit center can be assigned. As shown in the figure, the profit center reorganization processes are delivered through Web Dynpro-based applications.



Hint:

In the course, we start with the cost center object type because a change of the profit center has to be performed manually by creating a new time slice.

In comparison, objects of other object types affected by a profit center reorganization are selected automatically by the system. The reassignment is also completed with a program.



Caution:

It is not mandatory to start with the cost center object type in a reorganization of profit centers.

User Interface for Reorganization of Profit Centers



Side note: Which **user interface** do you need to create a **reorganization plan**?

- **An SAP NetWeaver Portal** (not shown in this course)
 - Use the *FIN Reorganization* portal role.
- **SAP NetWeaver Business Client**
 - To work with the SAP NetWeaver Business Client the SAP user needs (PFCG) **roles**, which are assigned in the ERP system:

S..	Role	Type	Valid From	Valid to	Name
	SAP_FI_GL_REORG_MANAGER		16.06.2010	31.12.9999	Reorganization Manager (f
	SAP_FI_GL_REORG_OBJLIST_OWNER		16.06.2010	31.12.9999	Object Owner for the Reorg

SAP delivers **two standard roles** for the reorganization of profit centers:

- A role for the **reorganization manager**
- A role for **object list owners**

Transaction code SU01: Assign needed role(s) to the user

Figure 64: User Interface for Reorganization of Profit Centers

SAP NetWeaver Business Client (NWBC) is an SAP user interface (UI) that offers a unified environment to work with classic SAP Graphical User Interface-based transactions and newer Web Dynpro-based applications. NWBC improves the user experience.

In 2010, SAP released version 3.0 of NWBC.

The following are the standard roles in NWBC:

- SAP_FI_GL_REORG_MANAGER: Reorganization Manager (FI-GL (New))
- SAP_FI_GL_REORG_OBJLIST_OWNER: Object Owner for the Reorganization (FI-GL (New))

The roles can be displayed in the transaction code PFCG.



Hint:

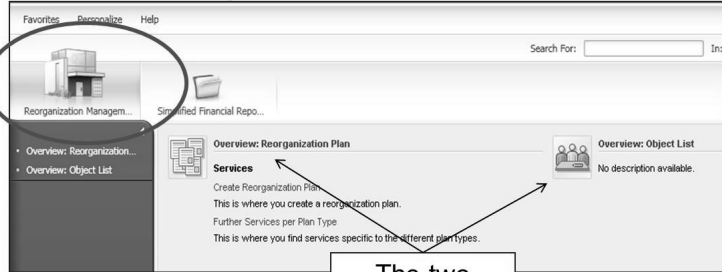
The assignment of the roles gives the user the permission to execute all the required reorganization steps. No new authorization objects are needed.

NetWeaver Business Client

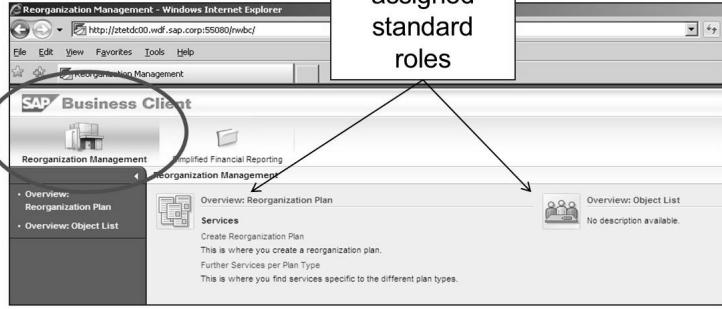


Side note: There are two variants of NetWeaver Business Client:



■ **NWBC for desktop:**



■ **NWBC for HTML:**



Start through an installed **SAP Logon** screen

Start, for example, through **transaction NWBC** and choose the respective   [/nwbc](#)

The two assigned standard roles

Figure 65: NetWeaver Business Client

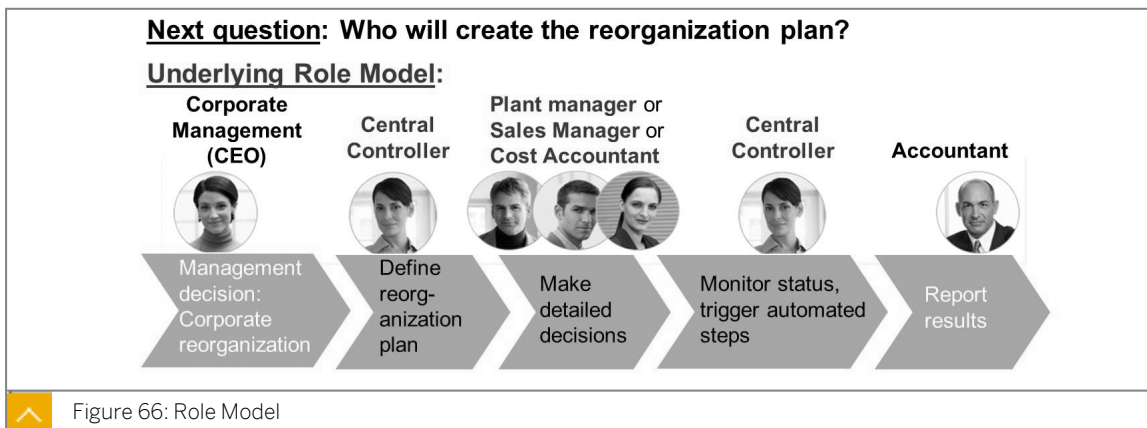
The NWBC exists in the following two variants:

- NWBC for Desktop

This is a rich desktop client that can be downloaded and then installed from the SAP Support Portal (www.service.sap.com → Logon to SAP Support Portal).
- NWBC for HTML

This can be started through a URL, which means that no installed client is required. Alternatively, as of EHP5, you can enter the transaction code `NWBC` from the SAP ERP system.

Role Model



The role model assumes a division of responsibilities with regard to the following fundamental tasks in the reorganization process:

- The reorganization manager is based on the central controller. Responsibilities include:
 - Editing reorganization plan, including creating, editing, closing, and deleting
 - Administrating object lists: Generating and assigning object list to object owners
 - Performing reassignment and executing transfer postings
- The object (list) owner is based on the plant manager or sales manager or cost accountant. Responsibilities include:
 - Maintaining object lists and releasing objects for reorganization.

The SAP PFCG-roles that reflect the underlying role model are as follows:

- Reorganization manager/central controller
SAP_FI_GL_REORG_MANAGER
- Object owner/plant manager or sales manager or cost accountant
SAP_FI_GL_REORG_OBJLIST_OWNER

Reorganization Plan – Step 1



Activity: Create a reorganization plan as the reorganization manager

Important assumption in the course and this slide:

Actual date = January of the current year (or before)

The reorganization date value has to be the first day of a period (of the leading ledger) in the future!



If the FI posting period in which the reorganization takes place (in our example: February) is not closed, you get, in standard, error: *Reorganization period is already open for company code #####* (Message no. FAGL_REORGANIZATION804)

Figure 67: Create Reorganization Plan (1)



Caution:

If you decided not to post the asset acquisition in January, but in the prior month, the reorganization date is the first of the current month. It is not, as described in the figure, February 1st.

Close the reorganization period (transaction code OB52) before saving, at least for account type +. See more information on the next figure.

By assuming that the actual date is January, the first possible reorganization date is February 1st as the company code works with fiscal year variant K4. Variant K4 indicates that the posting periods match the months of the calendar year.

However, a reorganization date further into the future is also possible.

If, according to your fiscal year variant, the periods do not match the months of the calendar year, the first day of a period can also be the 15th of the month, for example. You cannot use special periods.



Caution:
Only one reorganization plan can be active for each Controlling (CO) area.

Reorganization Plan – Step 2



More information to message no. FAGL_REORGANIZATION804:

Reorganization Plan: New

- ⓘ Reorganization period is already open for company code 2500 - [Display Help](#)
- ⓘ Reorganization period is already open for company code 2400 - [Display Help](#)
- ⓘ Reorganization period is already open for company code 2300 - [Display Help](#)
- ⓘ Reorganization period is already open for company code 2000 - [Display Help](#)
- ⓘ Reorganization period is already open for company code 1500 - [Display Help](#)

Display Message Log

Start Close

To go further on is not possible

Plan Type: * 001 Profit Center

Plan: * DFIS

Name: REORG Plan DFIS

Reorganization Date: * 01.02.2010

Hierarchy: * 202 RKT Training

Controlling Area: * 1000

You maintained, for example, the posting period variant of company code AA00 (variant 1000). Anyhow errors occur. Why?

- The reorganization plan is defined per controlling area.
- All listed, defective company codes are assigned to **controlling area 1000**.
- **All** posting period variants (transaction OB52) of company codes assigned to controlling area 1000 are checked.

Special settings for the demo of this course:
The system message can be changed in Customizing (transaction OBA5).

- The message is changed to an information note: Reorg
- As long as **company code AA00 is not** listed, you can go on ...

Figure 68: Create Reorganization Plan (2)

You can maintain the message control with the transaction code OBA5. Alternatively, go to *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Tools* → *Change Message Control*.

Reorganization Plan – Step 3



Activity: Create reorganization plan as the reorganization manager

Derivation hierarchy: Displays SAP object types involved in reorganization.

⚠ Customers are able to **define own hierarchy versions**, according to the object types (WBS elements, sales documents, fixed assets, ...) they use.

Profit Center DFI65_1

Profit Center DFI65_1

Profit Center DFI65_2

Figure 69: Create Reorganization Plan (3)

The derivation hierarchy is a hierarchy of object types that has to be reorganized entirely. This hierarchy shows the dependencies of the object types in terms of their content. It describes how the profit center is determined when an object of an object type is created.

Based on the object types, transactions in general ledger accounting are posted to the profit centers that the reorganization has to correct.

You can create and activate own derivation hierarchies in Customizing. You remove object types from the derivation hierarchy in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Reorganization* → *Basic Settings* → *Remove Object Types from Derivation Hierarchy*.

You can also add object types to your own hierarchy versions. You define your own version of a hierarchy in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Reorganization* → *Basic Settings* → *Settings for Experts* → *Define Own Version of Derivation Hierarchy*.



Note:

SAP delivers hierarchy version 001 with more or less all the available objects. This version cannot be changed.



Hint:

Working with customer-defined hierarchy versions makes sense; the less the SAP objects have to be considered, the better the system performance will be. You can also collect all the SAP objects that you use.

Reorganization Plan – Step 4



Activity: Create reorganization plan → Reorganization manager

If the old profit center is still used in future, it has to be assigned as well.

The second entry is sufficient if the old profit center is replaced by the new one.

Profit Center DFI65_1 → Profit Center DFI65_1
 Profit Center DFI65_1 → Profit Center DFI65_2

→ What further restrictions are displayed can be customized.

Figure 70: Create Reorganization Plan (4)

Mandatory Requirements: The old and new profit centers belong to the same CO area and are valid in the same company code.

Customize further restrictions: You specify the restriction characteristics for the reorganization plan type in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Reorganization* → *Basic Settings* → *Restriction Characteristics* → *Specify Restriction Characteristics for Reorganization Plan Type*.

Note: After saving, you can see all the object types of the derivation hierarchy on the *Object Lists* tab page (third tab). However, no objects have been assigned yet.

Phase Model – Phase A



Next question: Which tasks are performed and when during a reorganization?

Phase A:

Figure 71: Phase Model – Phase A

The tasks performed during a reorganization are as follows:

- REORG period is (still) closed in FI and CO (except planning) until the following steps have been executed:
 - Create new profit centers (if necessary).
 - Check reorganization Customizing, for example, the object type derivation hierarchy.
 - Create reorganization plan (REORG manager).
 - Add time slices with new profit center to cost center(s).
 - Generate object lists (REORG manager).
 - Assign the object responsible person per object (REORG manager).
 - Assign new profit centers to CO objects and release objects for further processing (object owner) to be able to post to those CO objects in the reorganization period.
- Optional: Regenerate and process object lists.
- Reorganization period can be opened after the execution of those steps.

Generating the object list is a repetitive task, because during the time new objects might be created which have to be integrated into the reorganization later. Thus, the list can change due to the fact that it has been regenerated.

You assign new profit centers to CO objects and release objects for further processing. For example, if an internal order is included in an object list, but not yet assigned to a new profit center and not yet released for further processing, postings relating to this internal order in the reorganization period will not be performed.

Change Cost Center

Object type: Cost Center
Phase A: Manually add new time slice with new profit center

Message after successful change:

Information
Post center DF165 is included in reorganization plan DF165 during save

Figure 72: Change Cost Center



Demonstration: In cost center *DF165*, change profit center from *DF165_1* to *DF165_2* by creating a new time slice or analysis period.




Caution:
The valid from date of the new time slice is equal to the reorganization date.

You need to create a new analysis period for cost centers. In the transaction `KS02`, call the menu and choose *Edit* → *Analysis Period ...* → *Choose Other analysis period*.

Mandatory restrictions to change the profit center in transaction KS02:

- The “valid from” date of the new analysis period must be the reorganization date.
- The new and the old profit centers must be assigned in the reorganization plan.
- If the cost center already carries values, which is the typical situation in reality, the period of the reorganization also must be closed in Controlling for all relevant actual business transactions.

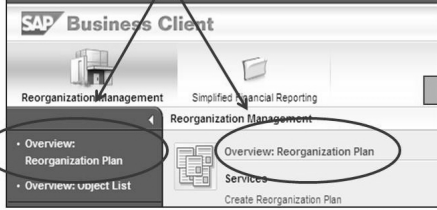


Caution:
If, in the course `AC612`, no posting was made to the cost center `DFI65`, the `CO` periods should not be closed in the transaction `OKP1` as the cost center is not debited.

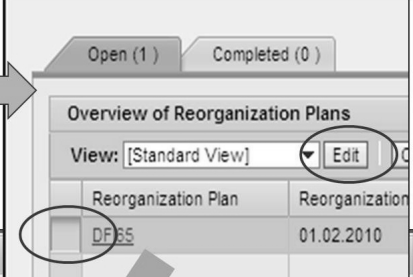
Edit Reorganization Plan

Activity: Edit reorganization plan → Reorganization manager // Phase A

There a **two ways** to enter:



Click REORG plan line -> Edit



Edit Reorganization Plan: DFI65 (Open)

Save Close

Basic Data | General Restrictions | Object Lists

Generation | Reassignment | Transfer Posting

Generate Release Open Refresh

Object List	No Generation	Log	History	Generation Date	Generated By	JobStatus	Generation Planned For	ObjList Processed Fully	Not Proc.	Objects
Material									0	0
Sales UDokument									0	0
Cost Center	X								0	1
Work Element									0	0
Internal Order									0	0

Click *Cost Center* to display the respective objects.

Figure 73: Edit Reorganization Plan

The changed cost center appears (without generating object lists) in the reorganization plan.



Hint:

The *Cost Center* object type allows you to maintain time slices; therefore, it is treated differently from other CO objects.

Generate Object Lists I

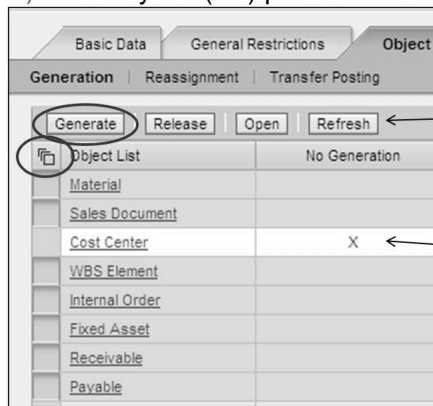


Activity: Generate object lists → Reorganization manager // Phase A

Question: What does generating object lists mean?

⇒ All **first level SAP objects** (materials, sales documents, WBS elements, internal orders, ...) that carry the (old) profit center are collected by the system:

1. Select (all or single) object types and click *Generate*.



2. Never forget to refresh!

For cost centers a list can not be generated as they are manually changed.



First level objects are all SAP objects that carry the profit center directly in the master data without a derivation (of the profit center) from other CO objects! *

Figure 74: Generate Object Lists I

Typical first level objects are internal orders, materials, WBS elements, and sales documents. Second level objects are fixed assets, receivables, and payables.



Hint:

The same object can be a first and second level object, depending on the way the SAP customer uses it.

For example, if an SAP customer posts a customer invoice with transaction **FB70** and assigns a profit center manually, the receivables are first level objects. If the same customer also works with Sales and Distribution (SD) and creates billing documents for sales orders, the receivables are second level objects as the profit center of the receivables is derived from the sales order.



Note:

The object lists can be generated as required to include all relevant objects. Once generated, the object list is not automatically updated when new objects are created. Run the generation again to update the object list.

Generate Object Lists II



Activity: Generate object lists → Reorganization manager or Phase A

Result:

Edit Reorganization Plan: DF Help

Save Close

Basic Data General Restrictions Object Li

Generation Reassignment Transfer Posting

Generate Release Open Refresh

Object List	No Generation	Obj.List Processed Fully	Not Proc.	Objects
Material		0	0	0
Sales Document		0	0	0
Cost Center	X	0	0	1
WBS Element		0	0	0
Internal Order		3	3	3
Fixed Asset		0	0	0
Receivable		0	0	0
Payable		0	0	0

- The three **internal orders with profit center DF165_1** are selected.
- The **fixed assets are second level objects** as they carry not only the profit center but also a cost center/internal order.

Figure 75: Generate Object Lists II

In the example, no material, sales document, cost center, and WBS element possess the old profit center DF165_1. No objects are selected. Only three internal orders are selected.

The yellow icon indicates the objects that are not fully processed.

Derivation Hierarchy and Object Types of the System Example

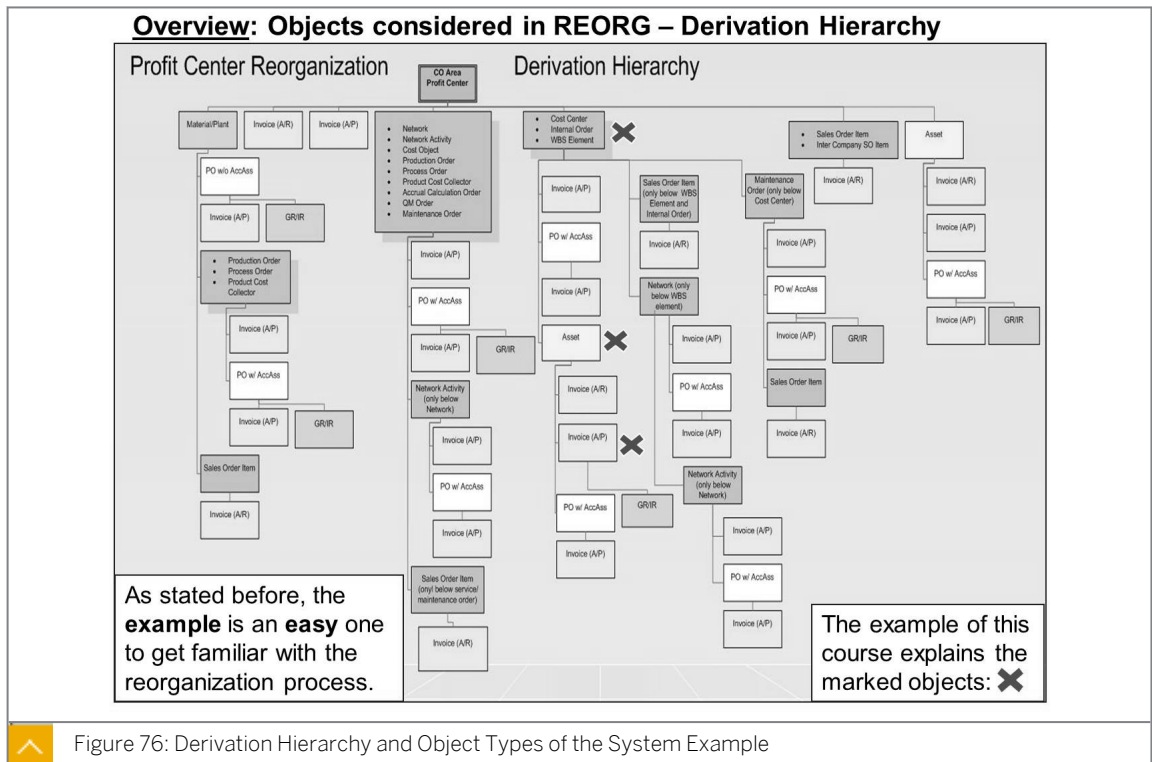


Figure 76: Derivation Hierarchy and Object Types of the System Example

The following objects are the first level objects that are shown in the top line of the hierarchy:

- Material or Plant
- Payable → Invoice (AR)
- Receivable → Invoice (AP)
- Network
- Network Activity
- Cost Object
- Production Order
- Process Order
- Product Cost Collector
- Accrual Calculation Order
- M Order
- Maintenance Order
- Internal Order
- Cost Center
- WBS Element
- Sales Order

- Fixed Asset

The following examples explain the first level and second level objects:

- First Example

You create a purchase order for an asset in which the profit center is derived from a cost center. The purchase order and the asset are second level objects as they both hold on to the profit center of the cost center.

- Second Example

You post a goods receipt for a purchase order for a material. The GR/IR account and the purchase order are second level objects as they hold on to the profit center of the material.

You display the objects of the figure in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Reorganization → Basic Settings → Remove Object Types from Derivation Hierarchy and display hierarchy version 001*.

Assign Responsible Person



Activity: Assign responsible person → Reorganization manager during phase A

Click, for example, the *Internal Order* object type (click the underlined text) in the *Object List* column:

If maintained, the **responsible user** of the **old profit center** is proposed as the **object owner**. The reorganization manager can change the owner if necessary.

Figure 77: Assign Responsible Person

The object owner is selected based on the *User Responsible* field in the old profit center master.

A BAdI (FAGL_R_GENERATE) is available that allows you to change the logic to make selections, for example, based on the project manager or the responsible user in the cost center master data.

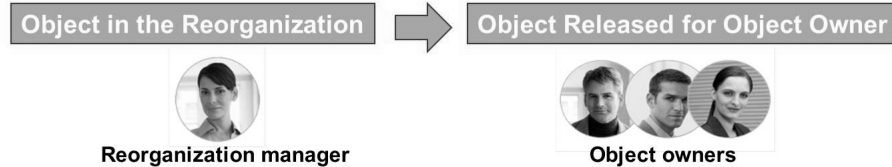
You can change the object owner for several objects in one step by choosing *Mark the orders of one object owner* → *Click Change Owner*.

Assign Responsible Person and Set Status



Activity: Assign responsible person per object **and** set status – Reorganization manager / Phase A

After maintaining the object owner(s) who is the **expert** for the individual objects, the reorganization manager also **changes** the **status** from:



After completing this step, the object list looks similar to this:

Object List Generation: Internal Order		Filter Settings
Object Status	Object Owner	
Object Released for Object Owner	UHRMANN	Save
Object Released for Object Owner	UHRMANN	
Object Released for Object Owner	HESSA	

Figure 78: Assign Responsible Person and Set Status



Hint:

You can maintain course participants as object owners. However, the easiest way is to maintain your own user. This allows you to maintain the object lists.

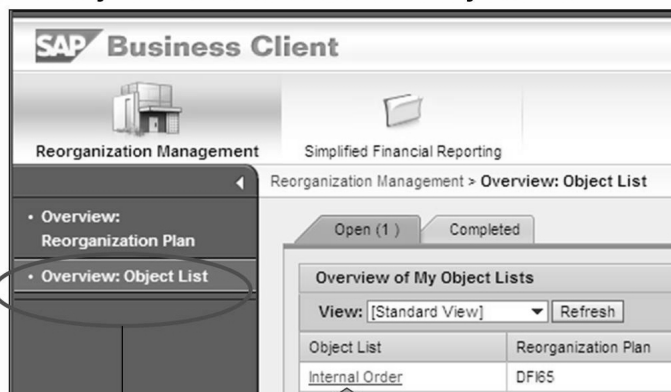
You can also change the status of several objects in one step.

Edit Worklist



Activity: Edit the worklist as the object owner during phase A of the reorganization

The object owners now find their object lists:



Click to edit

To be able to edit object lists as an object owner, the user needs the **SAP_FI_GL_REORG_OBJLIST_OWNER** role.

Figure 79: Edit Worklist

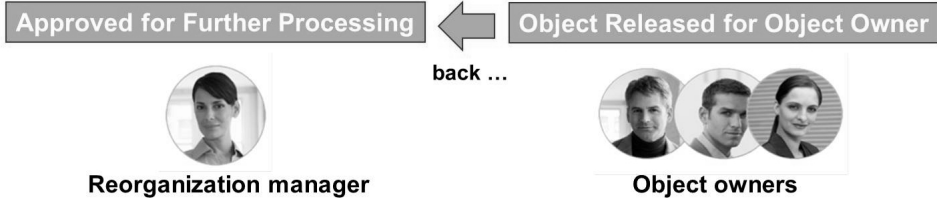
SAP delivers two standard roles for the users for the reorganisation of profit centers. These are Reorganization Manager (SAP_FI_GL_REORG_MANAGER) and Object List Owner for the Reorganization (SAP_FI_GL_REORG_OBJLIST_OWNER). In the figure, the user is assigned the SAP_FI_GL_REORG_MANAGER role. This allows you to see both roles: *Overview: Object List* and *Overview: Reorganization Plan* as the Manager role.

Operations of the Object Owner



Activity: Assign new profit centers as the object owner during phase A

The expert (object owner) **assigns** the **correct profit center** to the objects, for example, internal orders, and **changes** the **status**:



UI of the activity: **Before** editing

Reassignment: Internal Order

View: [Standard View] Change New Profit Center Set Status

Order	Old Profit Center	New Profit Center	Object Status
100339	DFI65_1		Object Released for Object Owner
100340	DFI65_1		Object Released for Object Owner
100341	DFI65_1		Object Released for Object Owner

UI of the activity: **After** editing

View: [Standard View] Change New Profit Center Set Status

Order	Old Profit Center	New Profit Center	Object Status
100339	DFI65_1	DFI65_2	Approved for Further Processing
100340	DFI65_1	DFI65_1	Approved for Further Processing
100341	DFI65_1	DFI65_2	Approved for Further Processing

Meaning: In one order the profit center is not changed.

Save

Figure 80: Operations of the Object Owner



Optional demonstration: Start the *Consistency Check for Fixed Assets After Reorganization* program before and after saving the status change.



Optional demonstration: Open the reorganization period in Financial Accounting (FI) and post to internal order 100339 in the REORG period before saving the status change. The error message *FAGL_REORGANIZATION008* occurs.

A document with a posting date before the REORG date will work with the old profit center.



Note:

In the *New Profit Center* column, you can only choose profit centers that are defined in the general restrictions of the reorganization plan.



Hint:

If you start the *Consistency Check for Fixed Assets After Reorganization* report before the assignment of the new profit centers, the status change is saved. You will have inconsistent assets if the asset master data has been assigned to a cost center and, for example, an internal order.

Reason: The system already knows that the cost center of the asset will be changed within the reorganization, but the change of the internal order is not yet assigned and saved.

If the *Consistency Check for Fixed Assets After Reorganization* report still displays inconsistent assets after saving the status changes, you have to make manual changes in the asset master data.

You can execute the Consistency Check for Fixed Assets After Reorganization report in the following ways:

- With a Web Dynpro application

The role of the reorganization manager contains a link to some check reports. The link is called *Further services per Plan Type*. One of the available reports there is the *POWERList Consistency Check for Fixed Assets*.

- With the ABAB program FAGL_R_ASSETS_CONSISTENZ_CHECK

You can start the program in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Reorganization* → *Specific Settings for Profit Center* → *Reorganizations* → *Reorganization of Fixed Assets* → *Check Profit Center Assignments in Asset Master Records*.

Check Reorganization Plan



Activity: Verify the REORG plan as the reorganization manager during phase A

The screenshot shows the 'Edit Reorganization Plan' dialog with the 'Object List' tab selected. A 'Refresh' button is circled. A callout box indicates 'All objects processed' and 'Not processed objects = 0'. Below is a table showing the status of various object types.

Obj. List	Processed Fully	Not Proc.	Objects
Material	0	0	0
Sales Document	0	0	0
Cost Center	0	0	1
WBS Element	0	0	0
Internal Order	0	0	3
Fixed Asset	0	0	0
Receivable	0	0	0
Pavable	0	0	0

Figure 81: Check Reorganization Plan

Verification of reorganization plan:

- After the approval of the object owners, a refresh (or a new call) changes the display of the processed objects.

- A regeneration of the object lists is possible anytime, for example, if new objects have meanwhile been created.

After saving the changes for all objects, the object list disappears from the object list overview of the object owner. If the object list remains visible, choose the *Refresh* pushbutton.

All the activities described so far have to be started in reorganization phase A.



How to Create a Reorganization Plan

1. Assign posting period variants to the company code(s).
 - a) Assign variants to company code in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Ledgers* → *Fiscal Year and Posting Years* → *Posting Periods* → *Assign variants to Company Code*.
 - b) On the *Change View "Assign Comp. Code → Posting Period variants"*: *Overview* screen, check the posting period variant assigned to company code AA00. If 1000 is the posting period variant already assigned, return to the *SAP Easy Access* screen.
2. Open and close posting periods.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Environment* → *Current Setting* → *FAGL_EHP4_T001B_COFI_Open and Close Posting Periods*.
 - b) On the *Change View "Posting Periods: Specify Time Intervals"*: *Overview* screen, choose the variant 1000.
 - c) Open periods 1 of 2011 to 6 of 2012.
 - d) Choose *Save*.
 - e) In the *Prompt for Customizing request* dialog box, choose the *Create Request* pushbutton.
 - f) In the *Create Request* dialog box, enter **Optional for course depending on settings** in the *Short Description* field.
 - g) Choose *Save*.
 - h) In the *Prompt for Customizing request* dialog box, choose *Continue*.
 - i) Return to the *Display IMG* screen.
3. Change the message control.
 - a) Change the message control in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Tools* → *Change Message Control*.
 - b) In the *Determine Work Area: Entry* dialog box, enter **FAGL_REORGANIZATION** in the *Application Area* field.
 - c) On the *Change View "Message Control by User"*: *Overview* screen for message number 804, choose *I* in the *Online* and *Batch1* columns and *E* in the *Standard* column.
 - d) Return to the *Display IMG* screen.
4. Execute the period lock for *Period 07*, for all transactions, in *Cost Element Accounting*.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Element Accounting* → *Environment* → *Period Lock* → *Change* (OKF1).
- b) On *Change Period Lock: Initial Screen*, enter the following data:

Field Name or Data Type	Value
<i>Controlling Area</i>	1000
<i>Fiscal Year</i>	Current fiscal year
<i>Version</i>	0

- c) Choose the *Actual* pushbutton.
- d) On the *Change Actual Period Lock: Edit* screen, choose *Period 07* for all transactions and choose the *Lock Period* pushbutton.
- e) Save your entries.
The system now displays the message *period locks for controlling area 1000 have been changed*.
5. Choose role *SAP_FI_GL_REORG MANAGER* from the user profile of user *AC-612##*.
- a) On the *SAP Easy Access* screen, choose *Tools* → *Administration* → *User Maintenance* → *Users* (SU01).
- b) On *User Maintenance: Initial Screen*, enter **AC-612##** in the *User* field.
- c) Choose the *Display* pushbutton.
- d) On the *Roles* tab page, choose the *SAP__FI_GL_REORG_MANAGER* row.
- e) Return to the *SAP Easy Access* screen.
6. Create a reorganization plan.
- a) On the *SAP Easy Access* screen, enter the transaction code *NWBC* and choose *Continue*.
- b) On the *Launch NetWeaver Business Client* screen, click *SAP_FI_GL_REORG MANAGER*.
- c) On the *Overview: Reorganization Plan* screen, click *Create Reorganization Plan*.
- d) On the *Reorganization Plan: New* screen, enter the following data:

Field Name or Data Type	Value
<i>Plan Type</i>	001 (Profit center)
<i>Plan</i>	Z001
<i>Name</i>	Sample (+3 months)
<i>Reorganization Date</i>	Today's date
<i>Hierarchy Version</i>	Z02 (Version DFI65/AC612)
<i>Controlling Area</i>	1000

- e) Choose *Continue*.

- f) On the *Create Reorganization Plan: Z001* screen, choose the *Display Hierarchy* pushbutton.
- g) In the *Hierarchy Display* dialog box, choose the *Expand* pushbutton and view the entries.
- h) On the *General Restrictions* tab page, enter **AA00** in the *Company Code* field and enter the following data:

Old Profit Center	New Profit Center
DF165_1	DF165_1
DF165_1	DF165_2

- i) Save your plan and check for the message *Plan Successfully Saved*.



How to Change the Profit Center in a Cost Center

1. Change the analysis period of the cost center and save a different profit center for the new analysis period.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Master Data* → *Cost Center* → *Individual Processing* → *Change* (KS02).
 - b) On *Change Cost Center: Initial Screen*, enter **DF165** in the *Cost Center* field and press ENTER.
 - c) On *Change Cost Center: Basic Screen*, choose *Edit* → *Analysis Period...*
 - d) In the *Analysis Time Frame: Select* dialog box, choose the *Other Period* pushbutton.
 - e) In the *Other Analysis Period* dialog box, enter the following data:

Field Name or Data Type	Value
<i>Valid From</i>	Today's date (+3 months)
<i>Valid To</i>	31.12.9999

- f) On *Change Cost Center: Basic Screen*, change the profit center to **DF165_2**.
- g) Save your data and choose the *Yes* pushbutton in the *Change the Field* dialog box. In the *Information* dialog box, the system displays the message *Cost Center DF165 is included in reorganization plan Z001 during save*.
- h) Choose *Continue*.
- i) Return to the *SAP Easy Access* screen.



How to Generate Object Lists

1. Generate object lists.
 - a) On the *SAP Easy Access* screen, enter transaction code `NWBC`.
 - b) On the *Launch NetWeaver Business Client* screen, click `SAP_FI_GL_REORG MANAGER`.
 - c) In the navigation area on the left, choose *Overview: Reorganization Plan*.
 - d) On the *Overview of Reorganization Plans* screen, double-click the reorganization plan `Z001`.
 - e) On the *Display Reorganization Plan: Z001 (Open)* screen, choose the *Edit* pushbutton.
 - f) On the *Edit Reorganization Plan: Z001 (Open)* screen, choose *Select All* and then the *Generate* pushbutton.
 - g) In the *Generation Planned For* dialog box, select the *Immediately* radio button and choose the *OK* pushbutton.
Check for the status *Object List Processed Fully*.
2. Work with unprocessed objects.
 - a) On the *Edit Reorganization Plan: Z001 (Open)* screen, choose the orders that have not been processed, if there are any.
 - b) On the *Object List Generation: Internal Order* screen, choose *Select All* and then the *Change Owner* pushbutton.
 - c) In the *Change Owner* dialog box, enter `AC612##` in the *Object Owner* field and choose the *OK* pushbutton.
 - d) On the *Object List Generation: Internal Order* screen, choose the *Set Status* pushbutton.
 - e) In the *Set Status* dialog box, choose *Allocated to Object Owner as Object Status* and choose *OK*.
 - f) Save your entries.
 - g) On the *Edit Reorganization Plan: Z001 (Open)* screen, choose the *Refresh* pushbutton.
 - h) Save your data.
Check for the message *not processed orders should be zero*.

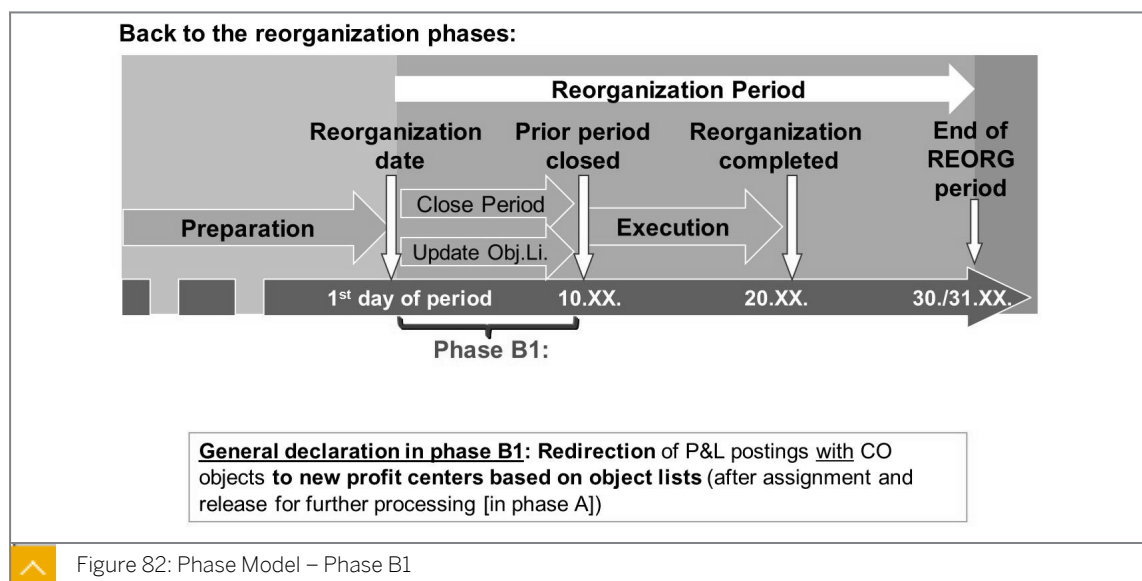


How to Release Object Lists

1. Check whether user `AC-612##` has authorization for role `SAP_FI_GL_REORG_OBJLIST_OWNER` and use that in `NWBC`.
 - a) On the *SAP Easy Access* screen, choose *Tools* → *Administration* → *User Maintenance* → *Users (SU01)*.

- b) On *User Maintenance: Initial Screen*, enter **AC-612##** in the *User* field.
 - c) Choose the *Display* pushbutton.
 - d) On the *Roles* tab page, choose the *SAP_FI_GL_REORG_OBJLIST OWNER* row.
 - e) Return to the *SAP Easy Access* screen.
 - f) Enter the transaction code *NWBC* and choose *Continue*.
 - g) On the *Launch NetWeaver Business Client* screen, choose *SAP_FI_GL_REORG_OBJLIST_OWNER*.
 - h) Click *Overview: Object List*.
2. Change the profit centers for the internal orders.
 - a) On the *SAP Easy Access* screen, enter the transaction code *NWBC* and choose *Continue*.
 - b) On the *Launch NetWeaver Business Client* screen, click *SAP_FI_GL_REORG_OBJLIST_OWNER* and then *Overview: Object List*.
 - c) On the *Overview of My Object Lists* screen, click *Internal Order* in the *Object List* column.
 - d) On the *Reassignment: Internal Order* screen, enter **10** in the *Object Status* field and choose the *Apply* pushbutton.
 - e) Choose the first two orders and then the *Change New Profit Center* pushbutton. Change the profit center for both the orders to *DF165_2* in the *New Profit Center* column.
 - f) Similarly, change the profit center of the third order to *DF165_1*.
 - g) On the *Reassignment: Internal Order* screen, choose *Select All* and then the *Set Status* pushbutton.
 - h) In the *Set Status* dialog box, choose *Approved for Further Processing as Object Status* and then *OK*.
 - i) Save the reassignment and return to the *SAP Easy Access* screen.
 3. Check profit center assignments in asset master records.
 - a) Check the profit center assignments in asset master records in *Customizing for Financial Accounting (New) under General Ledger Accounting (New) → Reorganization → Specific Settings for Profit Center Reorganizations → Reorganization of Fixed Assets → Check Profit Center Assignments in Asset Master Records*.
 - b) On the *Consistency Check for Fixed Assets* screen, enter **z001** in the *Fixed Asset* field.
 - c) Choose the *Execute* pushbutton.
 - d) On the *Consistency Check on Fixed Assets After Reorganization* screen, choose the profit center *DF165_1*.
 - e) Return to the *SAP Easy Access* screen.
-

Reorganization Period



Carry out an update run for RAPOST2000 for the previous period in company code AA00 and then close the previous posting period using transaction code OB52.



Caution:

The period-end activities are mandatory if you want to execute the *Reassignment* step successfully.



Note:

In the AC612 course, for example, only depreciation area 01 is posting to the general ledger. This means you do not need to run the periodic posting run RAPERP2000.

Reorganization period:

- Open REORG period and perform closing activities for prior period, for example,
 - Complete settlement of internal orders and WBS elements
 - Complete allocation of cost centers
 - Execute depreciation run in FI-AA and run program RAPERB2000*
 - Evaluate the foreign currency (ideally with activated delta posting logic)
- Optional: Regenerate and process object lists
 - Create new master data and assign old profit center in master data.
 - As the reorganization manager, regenerate object list.

- As the object owner, assign new profit center in object list.
- Check for consistency of assets
- Close prior FI period

The following are the new CO objects relevant for postings only as of the reorganization period:

- Create new master data and assign new profit center. Those CO objects are not included in reorganization.



Caution:

Without closing the prior period, you cannot proceed with the reorganization process.



Hint:

For example, if you look up the internal order in the master data in phase B1, you still see the old profit center. However, if an FI document, such as a vendor invoice, is posted in phase B1 with that internal order, the system automatically posts the invoice to the new profit center. Therefore, the profit & loss (P&L) line of the document, in data entry view, is already assigned to the new profit center and also, in the G/L view, all lines carry the new profit center.

Alternatively, any postings to that internal order with a posting date pertaining to a prior period will be assigned to the old profit center. This behavior is referred to as Quasi Time Dependency in phase B1.

However, postings without CO objects, such as a customer invoice without a sales order, but with a manually maintained profit center, cannot be redirected. Therefore, if you accidentally assign the old profit center in phase B1, the reorganization does not change the revenue line. Manually maintained P&L lines are not in scope.

Attention: If document splitting is activated, a regeneration of the object list for the receivables object type selects the customer line. The object list owner decides which is the correct profit center. If the customer invoice has been correctly assigned, the old profit center remains.

Phase Model – Phase B2

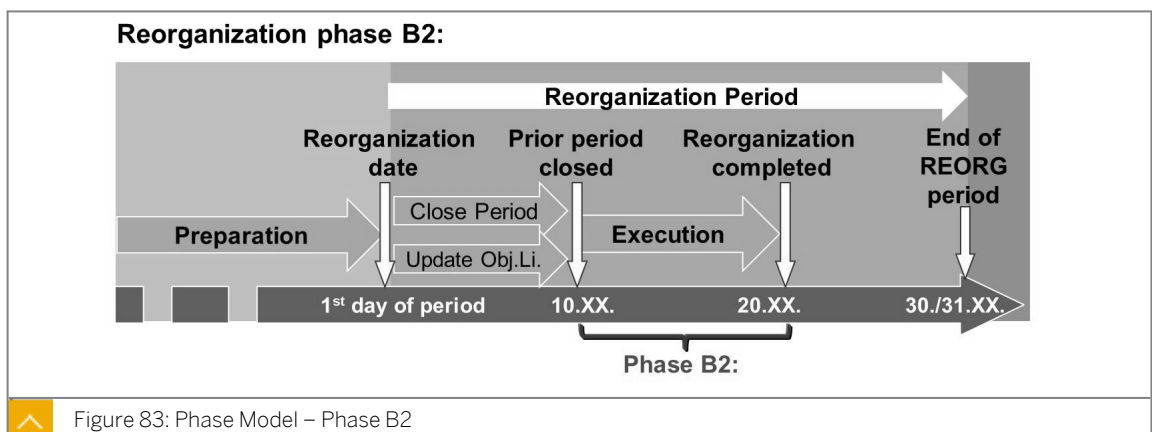


Figure 83: Phase Model – Phase B2

Phase B2:

- The object lists should ideally not change anymore. That is an organizational task. But object list processing can be repeated as often as required, for example, in case of errors.
- Automatic assignment of new profit center to all objects is executed.

Reassignment

- Execution of transfer postings takes place.
- Consistency checks.
- Close reorganization plan.

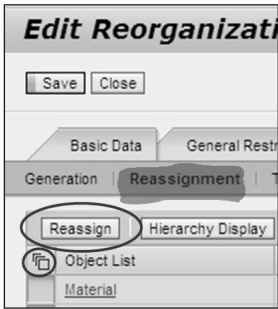
In phase B2, redirection of P&L postings to new profit centers takes place based on object lists. Balance sheet postings can still contain incorrect postings but will be reorganized during the later *Transfer Posting* step.

Reassignment



Activity: Start Reassignment → Reorganization manager // Phase B2

Select *Reassignment* tab → Mark (all) objects → Choose the *Reassign* button



After the completed reassignment run:

- (Two) **Internal orders** have master data changes.
 - Verify profit center in transaction KO04.
- Objects **Fixed Asset** (second level) are recognized, reassigned, **and** transferred. **That is a specialty!** For other objects, for example, payables a special transfer posting run has to be started.
 - Verify asset master data (transaction AS02), asset explorer (transaction AW01), and reorganization tool:

Click *Fixed Asset* in the *Transfer Posting* tab *

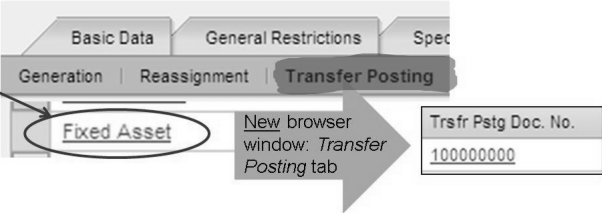


Figure 84: Reassignment

A new browser window opens. To see the document number, in the new window, choose the *Transfer Posting* tab page and then the *Apply* pushbutton. In the displayed table, scroll to the right.

The following are the specific characteristics of the fixed asset transfer posting:

- Reorganization documents are posted for every single asset and not cumulative per balance sheet account.
- In the document header of the asset transfer posting you see the header text *REORG [Name of REORG plan]/FA*.

The explained reorganization of fixed assets works only if the following conditions exist:

- Segment reporting for assets is activated in *Customizing for Financial Accounting (New)* under *Asset Accounting → Integration with General Ledger Accounting → Segment Reporting → Activate Segment Reporting*.
- The reorganization of fixed assets is activated in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Reorganization → Specific Settings for Profit Center → Reorganizations → Reorganization of Fixed Assets → Activate Reorganization of Fixed Assets*.

Check Reassignment



Activity: Verify reassignment after the reassignment run as the reorganization manager during phase B2

Object type Payable:

Payable ... 0 2

Click Payable in the **Reassignment** tab

New browser window: Click **Apply**

A/c Assignment Change Obj. List: Payable

View: V1 | Export

Fiscal Year	Company Code	Document Number	Old Profit Ce...	New Profit Center	Object Status
2010	AA00	1900000000	DF165_1	DF165_2	Reassignment successful
2010	AA00	1900000002	DF165_1	DF165_2	Reassignment successful

Look at the object status: Reassignment successful

But: The document/open item still carries the old profit center!

What happened: If **document splitting** is activated, **the open item** in table FAGL_SPLINFO was changed. So follow-on processes, like payments will have the new profit center ...

Figure 85: Check Reassignment



Hint:

Accounts receivables, accounts payables, and the GR/IR account are only in the scope of reorganization if document splitting is activated. If document splitting is not activated, payables and receivables are not assigned to a profit center (in the general ledger view of an FI document). Therefore, it makes sense to delete them in the derivation hierarchy. The system never selects them.

Only receivables and payables posted through customers and vendors and the FI subledgers Accounts Payable and Accounts Receivable are considered. From a business perspective, postings that are characterized as receivables or payables, but posted to general ledger accounts (not reconciliation accounts), are not taken into account.

Only open items on customer and vendor accounts are considered in reorganization.

Open special general ledger indicator items of type A (Down Payments and Down Payment Requests) are considered as well.



Note:

In the profit center derivation hierarchy, receivables and payables appear as objects on the first and on lower levels.

Examples of the first and lower levels are as follows:

- First level examples

During business transactions, receivables and payables receive their assignment to profit centers based on account assignments of offsetting postings, by direct assignments or by default settings.

- Lower level examples

Depending on the business process scenarios, the profit center information is passed through to receivables or payables through the assignment in, for example, sales orders, fixed assets, or CO objects.

The following postings regarding payables and receivables are not considered in profit center reorganization:

- Cleared items
- Recurring entry documents
- Transactional data resulting from specific closing activities. These postings affect only balance sheet items and the profit center balances to zero after the automatically created reversal posting, for example, transfer postings for doubtful receivables or reclassification of receivables and payables.

The following postings are out of scope – manual reorganization posting may be required:

- Interest calculation documents
- Special general ledger indicator transactions, except down payments and down payment requests

Before Transfer Postings



Activity: Execute transfer postings → Reorganization manager // Phase B2

Before transfer postings:

Edit Reorganization Plan: DF		Help	
Save Close			
Basic Data General Restrictions Object List			
Generation Reassignment Transfer Posting			
Transfer Open Refresh			
Object List	No Transfer Posting	Obj.List Processed Fully	Not Proc. Objects
Material		0	0
Sales Document		0	0
Cost Center	X	0	1
WBS Element		0	0
Internal Order		2	3
Fixed Asset	X	0	2
Receivable		0	0
Payable		2	2

Figure 86: Before Transfer Postings

**Caution:**

If an internal order is not settled completely in the prior period and is still debited with costs, no transfer posting is executed. P&L accounts are not in the scope of the reorganization. If the settlement is executed in the future, the new profit center is assigned.

After Transfer Postings

Activity: Execute transfer postings → Reorganization manager // Phase B2

After transfer postings:

Edit Reorganization Plan: DF

Save Close

Basic Data General Restrictions Object List

Generation Reassignment Transfer Posting

Transfer Open Refresh

Object List	No Transfer Posting	Obj.List Processed Fully	Not Proc.	Objects
Material		<input type="checkbox"/>	0	0
Sales Document		<input type="checkbox"/>	0	0
Cost Center	X	<input type="checkbox"/>	0	1
WBS Element		<input type="checkbox"/>	0	0
Internal Order		<input type="checkbox"/>	0	3
Fixed Asset	X	<input type="checkbox"/>	0	2
Receivable		<input type="checkbox"/>	0	0
Pavable		<input type="checkbox"/>	0	2

All objects processed
↕
Not processed objects = 0

Object List Transfer Posting

Figure 87: After Transfer Postings

In the *History* column, choose *Open*. The information about the posting run is displayed.

**Note:**

In the *Log* column, you see a message for the *Internal Order* object type – no balance will be transferred.

The message result from the fact that no balance sheet account is posted to internal orders. As mentioned earlier, costs (or P/L accounts) debited to the internal order are not transferred anyway.

Display Transfer Document in Reorganization Tool



Activity : Display transfer document (in reorganization tool)

The screenshot shows the 'Display Document: Data Entry View' window in the SAP Reorganization Tool. The 'Object List' at the top shows 'Transfer Posting' selected. Below it, the 'Selection Criteria' section includes 'View: L1', 'Display As: Table', and an 'Export' button. A table lists transactions with columns for Fiscal Year, Company Code, Document Number, Account, Amount in Trans., Currency, Old Profit Ce., New Profit Ce., Object Status, and Transfer Posting Doc. No. The 'Data Entry View' section contains fields for Document Number (100000002), Company Code (AA00), Fiscal Year (2010), Document Date (01.02.2010), Posting Date (01.02.2010), Period (2), Reference, Cross-CC no., Currency (EUR), and Ledger Group. Below this is a table of account entries with columns for C., Item, PK, SG, Account, Description, Amount, Curr., Tx, Profit Ctr, and Segment. The table shows two entries for account 160000 (AP-domestic) with amounts of 19,800.00 EUR, and a total of 0.00 EUR.

- Cumulated posting directly on reconciliation account
- Posting/Document date = Reorganization date

Figure 88: Display Transfer Document in Reorganization Tool

Document header text: REORG [Name of REORG plan]/AP

Transaction displayed in the document header: FAGL_R_INFO

The document is posted to all ledgers.

Display Transfer Document in ERP System



Display transfer document with SAP GUI (transaction code FB03)

Do you want to know which documents are cumulated?

The screenshot shows the SAP GUI interface. The 'Display Document: Data Entry View' window is open, displaying the same data as Figure 88. A 'Wow!!!' watermark is overlaid on the image. Below it, the 'Transfer Posting Object List' window is visible, showing 'Reorganization Plan: DF65' and 'Reorganization Date: 01.02.2010'. A table at the bottom of the screenshot shows the 'Object List' with columns for Fiscal Year, Company Code, Document Number, Account Number, Amount in Trans., and Currency. The table lists two documents for fiscal year 2010 and company code AA00: document 1900000000 with amount 13,200.00 EUR, and document 1900000002 with amount 6,600.00 EUR.

Figure 89: Display Transfer Document in ERP System



Hint:
If single sign-on is not activated, log on to NWBC.

Level of Completion



Activity: Verify level of completion → Reorganization manager

Reorganization Management > Overview: Reorganization Plan

Open (1) Completed (0)

Overview of Reorganization Plans

View: [Standard View] Edit Create Create with Template **Close Plan** Delete Refresh

Reorganization Plan	Reorganization Date	Created On	Created By	Objects	Overall Level of Completion	No
DFI65	01.02.2010	23.06.2010	HARTMANNJOE	7	100%	

Figure 90: Level of Completion

The *Delete* pushbutton is available. However, you can only delete a reorganization plan if no objects have the *Approved for Further Processing* status set by the object owner. If this status is set for the objects and you attempt to delete the reorganization plan, the system displays an error message *FAGL_REORGANIZATION031*.

Diagnosis: Reorganization plan XX cannot be deleted because objects already exist with at least the status *Approved for Further Processing*.

System Response: The reorganization plan is not deleted.

Phase Model – Phase C

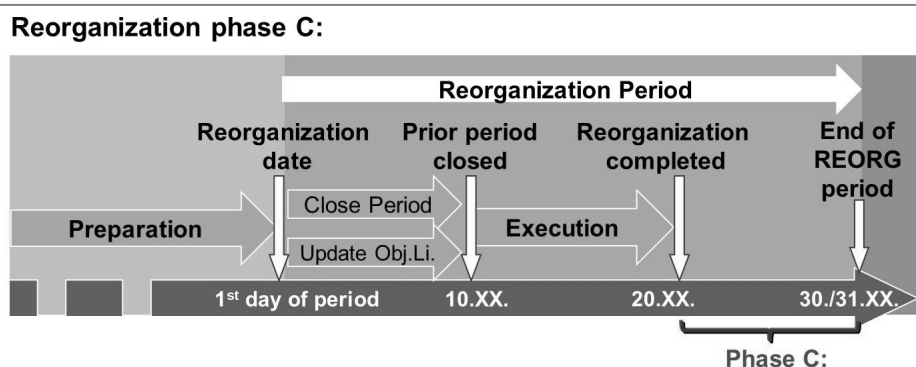


Figure 91: Phase Model – Phase C

The figure explains the steps involved in reorganization phase C.

Customizing

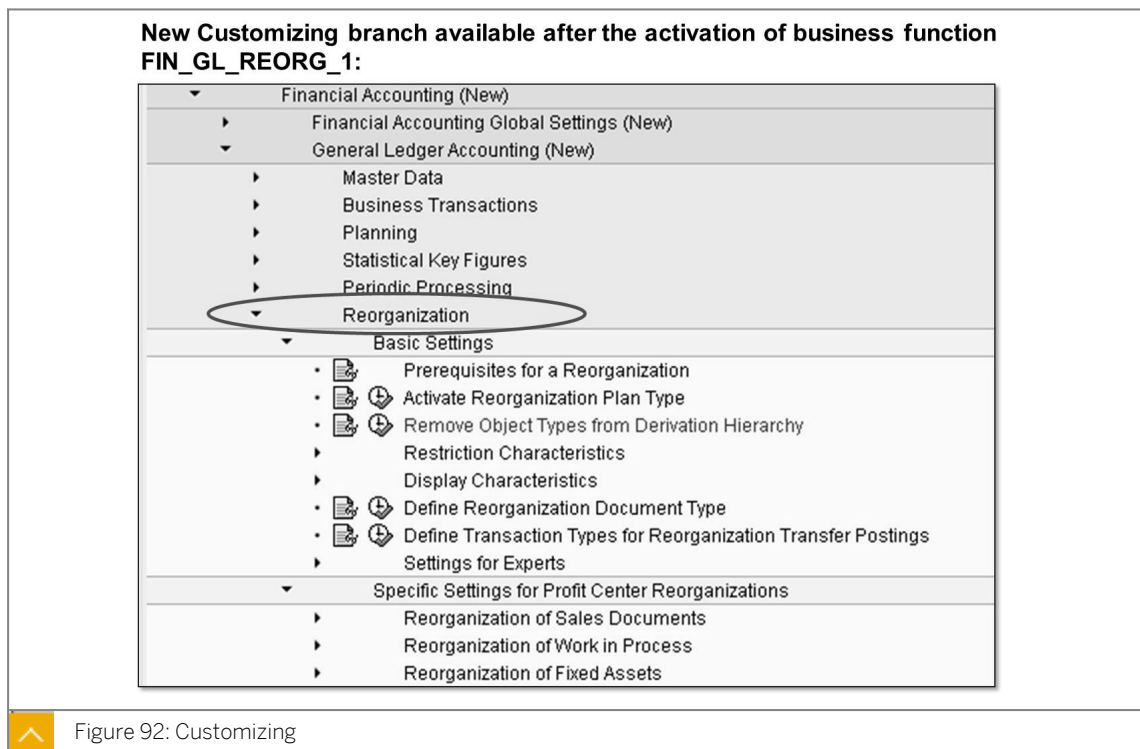


Figure 92: Customizing

Not all the steps in the new Customizing branch are mandatory.

To execute the reorganization example in this course, you have to perform the following steps:

- Activate the reorganization plan type – SAP delivers plan type 001 (Profit center)
- Activate at least one hierarchy version – SAP delivers version 001. Perform this in the step, Remove Object Types from derivation hierarchy.
- Define a reorganization document type – it is useful to create a new document type, for example, document type RG. If document splitting is activated, do not forget to classify the new document type for document splitting. Business transaction 0000 and business transaction variant 0001 are ok.
- Define (consolidation) transaction types for the reorganization postings. For acquisition, use consolidation transaction type 120, and for retirement consolidation, use transaction type 140.

If fixed assets are also part of the reorganization, activate the following:

- Active segment reporting for fixed assets in *Customizing for Asset Accounting* under *Integration with General Ledger Accounting* → *Segment Reporting* → *Activate Segment Reporting*. Activating segment reporting is mandatory if you want to activate the reorganization for fixed assets step.
- Reorganization for fixed assets in the displayed branch-specific settings for profit center reorganizations.

Further Information



- As of October 2010, reorganization of profit centers is embedded in the license model of SAP Landscape Transformation Software (SAP LT).
Contact your account manager for further information.
- Refer to SAP Note 1471153: EHP5: PRCTR and FM Reorganization - Collection of notes.



How to Start the Reassignment

- Open and close posting periods.
 - On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Environment* → *Current Settings* → *FAGL_EHP4_T001B COFI – Open and Close Posting Periods*.
 - On the *Change View "Posting Periods Specify Time Intervals": Overview* screen, choose the variant *1000*.
 - Open periods *1* of *2011* to *7* of *2012*.
 - Save your entries.
 - In the *Prompt for Customizing Request* dialog box, choose the *Create Request* pushbutton.
 - In the *Create Request* dialog box, enter **optional: depending on settings** in the *Short Description* field.
 - Save your entries.
 - In the *Prompt for Customizing request* dialog box, choose *Continue*.
 - Return to the *SAP Easy Access* screen.
- Unlock *Period 7* for actual postings.
 - On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Element Accounting* → *Environment* → *Period Lock* → *Change* (OKP1).
 - On *Change Period Lock: Initial Screen*, enter the following data:

Field Name or Data Type	Value
<i>Controlling Area</i>	1000
<i>Fiscal Year</i>	2012
<i>Version</i>	0

- Choose the *Actual* pushbutton.
- On the *Change Actual Period Lock: Edit* screen, select column *07*, and choose the *Unlock Period* pushbutton.
- Save your data.
- Return to the *SAP Easy Access* screen.

3. Execute the depreciation run.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Fixed Assets* → *Periodic Processing* → *Depreciation Run* → *Execute* (AFAB).
- b) On the *Depreciation Posting Run* screen, enter the following data:

Field Name or Data Type	Value
<i>Controlling Code</i>	AA00
<i>Fiscal Year</i>	2012
<i>Posting Period</i>	6
<i>Unplanned posting run</i>	Select
<i>Test Run</i>	Select

- c) Choose the *Execute* pushbutton. Choose the *Yes* pushbutton in the dialog box that appears.
- d) On the *Depreciation Posting Run for company code AA00* screen, check for *DF165_1* in the *Profit Ctr* column.
- e) Go back to the *Depreciation Posting Run* screen and deselect the *Test Run* checkbox.
- f) Choose *Program* → *Execute in Background*.
- g) In the *Background Print Parameters* dialog box, enter the following data and choose *Continue*:

Field Name or Data Type	Value
<i>Output Device</i>	LOCL
<i>Windows Printer</i>	SnagIt 8
<i>Number of Copies</i>	1

- h) In the *Start Time* dialog box, choose the *Immediate* pushbutton and save your data.
- i) Return to the *SAP Easy Access* screen.

4. Post a vendor invoice with two different dates.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Accounts Payable* → *Document Entry* → *Invoice* (FB60).
- b) On the *Enter Vendor Invoice: Company Code AA00* screen, enter the following data:

Field Name or Data Type	Value
<i>Vendor</i>	30500
<i>Invoice Date</i>	Last day of the current period
<i>Posting Date</i>	Last day of the current period
<i>Amount</i>	20000
<i>Tax Code</i>	0I (Input tax 10%)

Field Name or Data Type	Value
<i>Text</i>	Sample for prior period
<i>Calculate tax</i>	Select
<i>G/L Accounts</i>	470000
<i>Order</i>	100339
<i>D/C</i>	<i>Debit</i>
<i>Co...</i>	AA00

- c) Choose *Document* → *Simulate General Ledger*.
 - d) On the *General Ledger Simulation* screen, check for the profit center *DF165_1*.
 - e) Go back to the *Enter Vendor Invoice: Company Code AA00* screen.
 - f) Save your order.
 - g) Similarly, create another vendor invoice for amount 30000 and check for the profit center *DF165_2*.
 - h) Save your order.
 - i) Go back to the *SAP Easy Access* screen.
5. Process the error table in additional account assignment objects.
- a) Process the error table in *Customizing for Financial Accounting(New)* under *Asset Accounting* → *Integration with General Ledger Accounting* → *Additional Account Assignment Objects* → *Process Error Table*.
 - b) On the *Change View "FI-AA Error Messages for Account Assignment Objects": Overview* screen, choose *PRCTR* in the *AcctAsgnOb* column and *Information message* in the *Error* column.
 - c) Choose *SEGMENT* in the *AcctAsgnOb* column and *Information message* in the *Error* column.
 - d) Save your data.
 - e) Return to the *SAP Easy Access* screen.
6. Open and close posting periods.
- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Environment* → *Current settings* → *FAGL_EHP4_T001B COFI – Open and Close Posting Periods*.
 - b) On the *Change View "Posting Periods Specify Time Intervals": Overview* screen, select variant *1000*.
 - c) Open the periods from *7 of 2012* to *7 of 2012*.
 - d) Save your entries.
 - e) In the *Prompt for Customizing request* dialog box, choose *Continue*.
 - f) Return to the *SAP Easy Access* screen.

7. Execute reassignments.
 - a) On the *SAP Easy Access* screen, enter the transaction code `NWBC` and choose *Continue*.
 - b) On the *Launch NetWeaver Business Client* screen, click `SAP_FI_GL_REORG_MANAGER`.
 - c) In the navigation area on the left, choose *Overview: Reorganization Plan*.
 - d) On the *Overview of Reorganization Plans* screen, double-click the reorganization plan `Z001`. On the *Display Reorganization Plan: Z001 (Open)* screen, choose the *Edit* pushbutton.
 - e) On the *Object Lists* tab page, choose the *Reassignment* pushbutton and then the *Refresh* pushbutton.
 - f) Choose *Select All* and choose the *Reassign* pushbutton.
 - g) In the *Reassignment Planned For* dialog box, select the *Immediately* radio button and the *OK* pushbutton.
 - h) Choose the *Refresh* pushbutton and view the displayed data.
Check for the status object list processed fully.
 - i) Save your data.
8. Carry out reassignment for fixed assets
 - a) On the *SAP Easy Access* screen, enter transaction code `NWBC` and choose *Continue*.
 - b) On the *Launch NetWeaver Business Client* screen, click `SAP_FI_GL_REORG_MANAGER` and click *Overview: Object List*.
 - c) In the navigation area on the left, choose *Overview: Reorganization Plan* and double-click the reorganization plan `Z001`.
 - d) On the *Display Reorganization Plan: Z001 (Open)* screen, choose the *Edit* pushbutton.
 - e) On the *Object Lists* tab page, choose the *Reassignment* pushbutton and choose the *Fixed Assets* in the *Object List* column.
 - f) On the *A/C Assignment Change Obj. List: Fixed Assets* screen, choose the *Apply* pushbutton.
You notice that the fixed assets have new profit center `DF165_2` reorganized successfully.
 - g) Go back to the *Object Lists* tab page.
9. Transfer the fixed asset posting.
 - a) On the *Object Lists* tab page, choose the *Transfer Posting* pushbutton and choose the *Fixed Assets* in the *Object List* column.
 - b) On the *Object List* tab page, choose the *Apply* pushbutton.
 - c) On the *Transfer Posting* tab page, choose the *Apply* pushbutton and double-click the asset document to view the details.
You see that the postings are transferred to the new profit center `DF165_2`.
10. Carry out reassignment for internal order and payables.

- a) On the *Object Lists* tab page, choose the *Reassignment* pushbutton and choose the *Internal Order* in the *Object List* column.
- b) On the *A/C Assignment Change Obj. List: Internal Order* screen, choose the *Apply* pushbutton and check the displayed internal order list.
You find that the new profit center *DF165_2* and the message is reorganized successfully.
- c) On the *Reassignment* tab page, click *Payable* in the *Object List* column.
- d) On the *A/C Assignment Change Obj. List: Payable* screen, choose the *Apply* pushbutton and check the payables data.
You find that the new profit center *DF165_2* and the message is reorganized successfully.
- e) Save your data.
- f) Return to the *SAP Easy Access* screen.



How to Execute Transfer Postings

1. Edit the reorganization plan and carry out transfer postings for all objects.
 - a) On the *SAP Easy Access* screen, enter transaction code *NWBC* and choose *Continue*.
 - b) On the *Launch NetWeaver Business Client* screen, click *SAP_FI_GL_REORG_MANAGER*.
 - c) Click *Overview: Object List*.
 - d) In the navigation area on the left, choose *Overview: Reorganization Plan*.
 - e) On the *Overview of Reorganization Plans* screen, double-click the reorganization plan *Z001*.
 - f) On the *Display Reorganization Plan: Z001 (Open)* screen, choose the *Edit* pushbutton.
 - g) On the *Object Lists* tab page, choose the *Transfer Posting* pushbutton, choose *Select All*, and choose the *Transfer* pushbutton.
 - h) In the *Transfer Posting Planned For* dialog box, select the *Immediately* radio button and choose the *OK* pushbutton.
 - i) On the *Objects Lists* tab page, choose the *Refresh* pushbutton and choose the object list *Payable*.
 - j) On the *Transfer Posting Object List: Payable* screen, choose the *Apply* pushbutton and view the list of payables.
2. Transfer payables posting.
 - a) On the *Transfer Posting* tab page, choose the *Apply* pushbutton.
 - b) View the transferred data and click the transfer posting document number.
 - c) On the *Display Document: Data Entry View* screen, view the displayed accounts and check for the reorganization status.

- d) On the *Object Lists* tab page, choose the *View Log* pushbutton and check the message logs, if any, for the reorganization status.
- e) In the *Log* dialog box, view the details of *Open (2)*.
- f) Save your data.



LESSON SUMMARY

You should now be able to:

- Create a reorganization plan



Learning Assessment

1. The derivation hierarchy is an overview of all SAP _____ that can be involved in a profit center reorganization.

Choose the correct answer.

A objects

B object types

C account

2. Postings that are characterized as receivables or payables, but posted to general ledger accounts (not reconciliation accounts), are not taken into account for reassignment.

Determine whether this statement is true or false.

True

False

3. Only cleared items on customer and vendor accounts are considered in reorganization.

Determine whether this statement is true or false.

True

False



Learning Assessment - Answers

1. The derivation hierarchy is an overview of all SAP _____ that can be involved in a profit center reorganization.

Choose the correct answer.

- A objects
 B object types
 C account

2. Postings that are characterized as receivables or payables, but posted to general ledger accounts (not reconciliation accounts), are not taken into account for reassignment.

Determine whether this statement is true or false.

- True
 False

3. Only cleared items on customer and vendor accounts are considered in reorganization.

Determine whether this statement is true or false.

- True
 False

UNIT 5

Profit Center Planning

Lesson 1

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Lesson 2

Outlining Planning Integration	225
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UNIT OBJECTIVES

- Describe the configuration of profit center planning
- Understand planning integration



Preparing Planning Configuration

LESSON OVERVIEW

This lesson shows you how to define the version and planner profile for Profit Center Accounting (PCA).

Business Example

Profit planning and financial statement planning should also be possible at profit center level. For this reason, you require the following knowledge:

- An understanding of the settings that have to be made in Customizing



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Describe the configuration of profit center planning

Configuration of Profit Center Planning

As it is possible to represent PCA in new General Ledger Accounting (new G/L), you now want to enter plan data.



Caution:

In addition to profit center plan data, you can also plan other characteristics in Financial Accounting (FI), for example, a segment or functional area.

To do this, you have to make certain configurations. Most of the settings are made in Customizing, but some are also made in the *SAP Easy Access* menu.



These settings are as follows:



- Activate totals table FAGLFLEXT for planning.
- Import planning layouts from client 000. The planning layouts OFAGL... are provided for planning in new G/L. If it is not delivered, create a planning document type such as a PO and the corresponding number ranges per company code.



Caution:

This configuration is also required even if you do not want to enter any plan line items with this document type.

- Define plan version from a historical perspective. It would be logical to use plan version 1 for FI. For integrated planning with Controlling (CO), it may be preferable to use version 0 because the plan versions in FI and CO would then need to have the same name.
- Assign the plan version to a fiscal year.
- In the application, set the planner profile (SAPFAGL) and select table FAGLFLEXT as the table to be planned.

Now the system is able to store plan data in the totals table FAGLFLEXT and you can enter plan data (in FI). On the *SAP Easy Access* screen, choose *General Ledger → Periodic Processing → Planning → Plan Values → Enter (New)*.

Settings to Activate Planning in new General Ledger Accounting


You need the following settings to activate planning in new G/L:

- Activate the summary table in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Planning → Technical Help → Install Summary Table*.
- Import planning layouts in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Planning → Technical Help → Import Planning Layouts*.
- Define plan periods in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Planning → Define Plan Periods*.
- Set the planner profile on the *SAP Easy Access* screen by choosing *General Ledger → Periodic Processing → Planning → Set Planner Profile*.
- Create planning document types in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Planning → Define Document Types for Planning*.
- Define the plan version in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Planning → Plan Versions → Define Plan Versions*.
- Assign the plan version to a fiscal year in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Planning → Plan Versions → Fiscal-Year-Dependent Version Parameters → Assign Plan Version to Fiscal Year and Activate*.
- Activate plan line items in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New) → Planning → Plan Versions → Fiscal-Year-Dependent Version Parameters → Activate Line Items for Planning*.

The transaction code for planning in new G/L is GP12N.

Planning Layouts for Planning in Financial Accounting





The standard planning functions in FI support the following planning scenarios:

- Planning for profit center and account
- Planning for profit center group and account
- Planning for segment and account
- Planning for profit center, functional area, and account
- Planning for profit center, partner profit center, and account
- Planning for cost center (strictly in FI) and account
- Planning without characteristics, only for accounts

Figure 93: Planning Layouts for Planning in Financial Accounting

Direct planning in FI is always saved together with an account. This means that it is easy to plan primary processes. However, it is not possible to plan secondary processes (such as activities) directly from FI. This is only possible through integrated planning with Overhead Cost Controlling (CO-OM) in the standard system with Enhancement Package 3 (EHP3) or SAP Note 1009299.

There are standard drilldown reports that enable you to evaluate the plan data for accounts in FI. On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Information System* → *General Ledger Reports* → *Financial Statement/Cash Flow* → *General* → *Plan/Actual Comparisons* → *Financial Statement: Plan/Actual Comparison*.

When you start the drilldown report without specifying a financial statement structure in the selection screen, the plan and actual values for the accounts are compared directly. If you do not specify a financial statement structure, the period values are summarized up to the chosen selection period. If you only want to evaluate the plan values for a month (only for the month of March, for example), you cannot proceed further by entering a financial statement structure. EHP3 includes additional drilldown reports for profit centers and segment plans. These drilldown reports even offer selection by cost element (and not only by account).

Note:
If a segment is defined in a profit center master record, the plan data for that profit center is saved automatically for the corresponding segment.

More Detailed Information on Planning in Financial Accounting



Additional planning options:



- You can activate “cumulative plan data entry for balance sheet accounts”.
- You can import planning data from an external data source into new General Ledger Accounting. To do so, use a Business Application Programming Interface:

- BAPI name or function module: BAPI_FAGL_PLANNING_POST
- BAdI implementation: Transaction code BAPI
- You can customize the settings to only transfer records that fulfill specific criteria by using a Business Add-In:
 - BAdI name: BADI_GL_PLANNING
 - BAdI implementation: Transaction code SE18 or SE19



Note:

You can also use the BADI_GL_PLANNING BAdI if you want the system to take customer fields into account during the transfer of planning data.

- You can import FI planning data as an Excel upload using standard ERP functions - that is, without EHP.

In the default settings, the period screen for planning in new G/L (transaction code GP12N) shows the stock change values by period. If you activate cumulative plan data entry for balance sheet accounts, however, the planned balance sheet values are displayed for balance sheet accounts (and only for balance sheet accounts) instead of the balance sheet change values.

You activate cumulative plan data entry for balance sheet accounts in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Planning* → *Activate Cumulative Plan Data Entry for Balance Sheet Accounts*. For example, you have activated cumulative plan data entry. You use transaction code GP12N to enter EUR 12,000 for balance sheet account 11000 with distribution key 2.

Go to the period screen. The period screen shows EUR 12,000 for each of the period from 1 to 12. This means that you have planned a balance of EUR 12,000 on the account in every period. There are no balance sheet changes in periods 2 to 12. If cumulative plan data entry is not active for balance sheet accounts and you enter the same values as above, the period screen shows EUR 1,000 for each of the period from 1 to 12. This means that the account balance increases by EUR 1,000 in every period. If cumulative plan data entry is active for balance sheet accounts, a balance carryforward is possible for planning data in FI (transaction code FAGL_PLAN_VT).

Path to BAPI and BAdI: Go to *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Planning* → *External Plan Data Transfer* → ...



How to Plan Manually

You enter manual plan values for the expected sales and production processes for profit center 612##. You enter manual plan values for balance sheet depreciation in the profit and loss (P&L) statement, as well as the corresponding value adjustments in the balance sheet. You also enter the asset portfolio for profit center 611##. You plan cost accounting depreciation in Asset Accounting. Analyze the effects of the planning in reporting.

1. Plan the following expenses in the P&L statement for the expected postings from the production and sales area of profit center 612##, using layout OFAGL-01. Enter the following values on the initial screen:

Field Name or Data Type	Value
From Period	1
To Period	12
Profit Center	612##
Company Code	1000
Ledger	0L
Version	0
Fiscal Year	Current fiscal year
Currency	EUR
Account Number	800000
to	895000
Entry	Free

Choose *Overview Screen* or F5.



Hint:

You can also maintain the plan values if you use the *Form-Based* entry. However, in *Form-Based*, every account is displayed, whether or not there are plan or actual amounts. This is the reason for using free entry in this exercise.

Enter the following data for profit center 612##:

Account Number	Trans. Currency
800000	-1200000
893015	360000
895000	-360000
890000	240000

Can you also plan secondary costs of production (such as production overhead) at this point?

- On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Periodic Processing* → *Planning* → *Planned Values* → *Enter (New)*.
- On the *Plan data Change Charact.* screen, enter the data listed in the table.
- Post your data.
- Return to the *SAP Easy Access* screen.

You cannot enter any secondary costs from CO in manual planning.

- Plan the following values in the P&L statement for the expected postings from the asset area of profit center 611##, using layout *OFAGL-01*. Enter the following values on the initial screen:

Field Name or Data Type	Value
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center</i>	611##
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>Currency</i>	EUR
<i>Account Number</i>	1000
<i>to</i>	211200
<i>Entry</i>	Free

Choose *Overview Screen* or F5. Enter the following data for profit center 611##:

Account Number	Trans. Currency
1000	100000
1010	-2000
211200	2000

Examine the periodic values from balance sheet account 1000. Why is the annual value updated in every monthly period?

- On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Periodic Processing* → *Planning* → *Plan Values* → *Enter (New)*.
- On the *Plan data Change Charact.* screen, enter the data listed in the table.
- Save your data.
- Activate cumulative plan data entry in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Planning* → *Activate Cumulative Plan Data Entry for Balance Sheet Accounts*.

The entered value is updated as an asset value in every period because cumulative plan data entry is active for balance sheet accounts.

- Run the report for primary cost planning: depreciation/interest. Enter the following parameters:

Field Name or Data Type	Value
<i>Company Code</i>	1000
<i>Plan Version</i>	0
<i>Cost Center</i>	T611##
<i>Depreciation Area</i>	20

Field Name or Data Type	Value
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Fixed Assets* → *Periodic Processing* → *Primary Cost Planning: Depreciation/Interest*.
 - b) On the *Primary Cost Planning: Depreciation/Interest* screen, enter the data listed in the table.
 - c) Post your data.
 - d) Return to the *SAP Easy Access* screen.
4. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group</i>	GROUP##

Analyze the planned values and the P&L statement from profit centers 611## and 612##.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Group: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Choose the *Execute* pushbutton.
- d) View the displayed report.



Plan Profit Centers Manually

Business Example

Your company management wants to enable plan or actual comparisons in PCA. You therefore activate planning on a profit center basis in FI.

Task 1

Check the version settings for planning in PCA.

1. Can you plan in the current fiscal year?
2. Is manual planning possible in version 0 (ledger 0L)? Can plan data be transferred from CO-OM?
3. Is planning with line items possible in the current fiscal year in company code 1000?

Task 2

Enter manual plan data for administrative expenses.

1. Set planner profile SAPFAGL for summary table FAGLFLEXT.

Task 3

1. Plan the following expenses in the P&L statement for the expected postings from the production and sales area of profit center 612##, using layout OFAGL-01. Enter the following values on the initial screen:

Field Name or Data Type	Value
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center</i>	612##
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>Currency</i>	EUR
<i>Account Number</i>	800000
<i>to</i>	895000

Field Name or Data Type	Value
Entry	Free

Choose *Overview Screen* or F5.



Hint:

You can also maintain the plan values if you use the *Form-Based* entry. However, in *Form-Based*, every account is displayed, whether or not there are plan or actual amounts. This is the reason for using free entry in this exercise.

Enter the following data for profit center 612##:

Account Number	Trans. Currency
800000	-1200000
893015	360000
895000	-360000
890000	240000

Can you also plan secondary costs of production (such as production overhead) at this point?

Task 4

You enter manual plan values for balance sheet depreciation in the P&L statement, as well as the corresponding value adjustments in the balance sheet. You also enter the asset portfolio for profit center **611##**.

- Plan the following values in the P&L statement for the expected postings from the asset area of profit center **611##**, using layout *OFAGL-01*. Enter the following values on the initial screen:

Field Name or Data Type	Value
From Period	1
To Period	12
Profit Center	611##
Company Code	1000
Ledger	0L
Version	0
Fiscal Year	Current fiscal year
Currency	EUR
Account Number	1000
to	211200

Field Name or Data Type	Value
<i>Entry</i>	<i>Free</i>

Choose the *Overview Screen* pushbutton or press F5. Enter the following data for profit center 611##:

Account Number	Trans. Currency
1000	100000
1010	-2000
211200	2000

Examine the periodic values from balance sheet account 1000. Why is the annual value updated in every monthly period?

Task 5

You plan cost accounting depreciation in Asset Accounting.

1. Run the report for primary cost planning: depreciation/interest. Enter the following parameters:

Field Name or Data Type	Value
<i>Company Code</i>	1000
<i>Plan Version</i>	0
<i>Cost Center</i>	T611##
<i>Depreciation Area</i>	20
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12

Task 6

Analyze the effects of the planning in reporting.

1. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000

Field Name or Data Type	Value
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group</i>	GROUP##

Analyze the planned values and the P&L statement from profit centers 611## and 612##.



Plan Profit Centers Manually

Business Example

Your company management wants to enable plan or actual comparisons in PCA. You therefore activate planning on a profit center basis in FI.

Task 1

Check the version settings for planning in PCA.

1. Can you plan in the current fiscal year?
 - a) Define plan periods in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Planning* → *Define Plan Periods*.
The posting periods of the current fiscal year are defined in variant 1000.
2. Is manual planning possible in version 0 (ledger OL)? Can plan data be transferred from CO-OM?
 - a) Define plan versions in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Planning* → *Plan Versions* → *Define Plan Versions*.
3. Is planning with line items possible in the current fiscal year in company code 1000?
 - a) Assign and activate plan version to fiscal year in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Planning* → *Plan Versions* → *Fiscal-Year-Dependent Version Parameters* → *Assign Plan Version to Fiscal Year and Activate*.
Planning with line items is possible in the current fiscal year.
 - b) Return to the *SAP Easy Access* screen.

Task 2

Enter manual plan data for administrative expenses.

1. Set planner profile SAPFAGL for summary table FAGLFLEXT.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Periodic Processing* → *Planning* → *Set Planner Profile*.
 - b) In the *Set Planner Profile* dialog box, enter **SAPFAGL** in the *Planner profile* field.
 - c) Press ENTER.
 - d) In the *Selection of the Tables to be Planned* dialog box, enter **FAGLFLEXT** in the *Summary table* field.
 - e) Choose *Continue*.

Task 3

1. Plan the following expenses in the P&L statement for the expected postings from the production and sales area of profit center 612##, using layout OFAGL-01. Enter the following values on the initial screen:

Field Name or Data Type	Value
From Period	1
To Period	12
Profit Center	612##
Company Code	1000
Ledger	0L
Version	0
Fiscal Year	Current fiscal year
Currency	EUR
Account Number	800000
to	895000
Entry	Free

Choose *Overview Screen* or F5.



Hint:

You can also maintain the plan values if you use the *Form-Based* entry. However, in *Form-Based*, every account is displayed, whether or not there are plan or actual amounts. This is the reason for using free entry in this exercise.

Enter the following data for profit center 612##:

Account Number	Trans. Currency
800000	-1200000
893015	360000
895000	-360000
890000	240000

Can you also plan secondary costs of production (such as production overhead) at this point?

- On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Periodic Processing* → *Planning* → *Planned Values* → *Enter (New)*.
- On the *Plan data Change Charact.* screen, enter the data listed in the table.
- Post your data.

- d) Return to the *SAP Easy Access* screen.
You cannot enter any secondary costs from CO in manual planning.

Task 4

You enter manual plan values for balance sheet depreciation in the P&L statement, as well as the corresponding value adjustments in the balance sheet. You also enter the asset portfolio for profit center **611##**.

- Plan the following values in the P&L statement for the expected postings from the asset area of profit center **611##**, using layout *OFAGL-01*. Enter the following values on the initial screen:

Field Name or Data Type	Value
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center</i>	611##
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Version</i>	0
<i>Fiscal Year</i>	Current fiscal year
<i>Currency</i>	EUR
<i>Account Number</i>	1000
<i>to</i>	211200
<i>Entry</i>	<i>Free</i>

Choose the *Overview Screen* pushbutton or press F5. Enter the following data for profit center **611##**:

Account Number	Trans. Currency
1000	100000
1010	-2000
211200	2000

Examine the periodic values from balance sheet account 1000. Why is the annual value updated in every monthly period?

- On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Periodic Processing* → *Planning* → *Planned Values* → *Enter (New)*.
- On the *Plan data Change Charact.* screen, enter the data listed in the table.
- Post your data.

- d) The entered value is updated as an asset value in every period because cumulative plan data entry is active for balance sheet accounts. You can check this in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Planning* → *Activate Cumulative Plan Data Entry for Balance Sheet Accounts*.

Task 5

You plan cost accounting depreciation in Asset Accounting.

1. Run the report for primary cost planning: depreciation/interest. Enter the following parameters:

Field Name or Data Type	Value
<i>Company Code</i>	1000
<i>Plan Version</i>	0
<i>Cost Center</i>	T611##
<i>Depreciation Area</i>	20
<i>Fiscal Year</i>	Current fiscal year
<i>From Period</i>	1
<i>To Period</i>	12

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *Fixed Assets* → *Periodic Processing* → *Primary Cost Planning: Depreciation/Interest*.
- b) On the *Primary Cost Planning: Depreciation/Interest* screen, enter the data listed in the table.
- c) Post your data.
- d) Return to the *SAP Easy Access* screen.

Task 6

Analyze the effects of the planning in reporting.

1. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal Year</i>	Current fiscal year

Field Name or Data Type	Value
<i>From Period</i>	1
<i>To Period</i>	12
<i>Profit Center Group</i>	GROUP##

Analyze the planned values and the P&L statement from profit centers 611## and 612##.

- a) On the SAP Easy Access screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection: Profit Center Group: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Choose the *Execute* pushbutton.
- d) View the displayed report.



LESSON SUMMARY

You should now be able to:

- Describe the configuration of profit center planning



Outlining Planning Integration

LESSON OVERVIEW

This lesson shows you how planning data from Overhead Cost Controlling (CO-OM) can be transferred to Financial Accounting (FI).

Business Example

Sales and cost plans are transferred from Profitability Analysis (CO-PA) and Cost Center Accounting to Profit Center Accounting (PCA). For this reason, you require the following knowledge:

- An understanding of planning integration



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Understand planning integration

Integrated Planning

Until now in classic G/L, you carried out planning for your cost centers (and/or orders) in CO. You may have also used integrated planning (CO->EC-PCA) to transfer your planning data to traditional Profit Center Accounting.



In new G/L, the planning options to represent Profit Center Accounting in new General Ledger Accounting are as follows:



- Activate the Integrated Planning indicator in the FI plan version.
- The Integrated Planning indicator must also be set in the CO plan version. (This indicator is set by default in the above situation.)



Result of using new G/L



- You continue to plan in component CO-OM.
- The plan data is transferred online to FI and, provided it is the correct "environment" (for example, a profit center is maintained in the master data of the cost center), to (the FI characteristics) profit center (and segment).



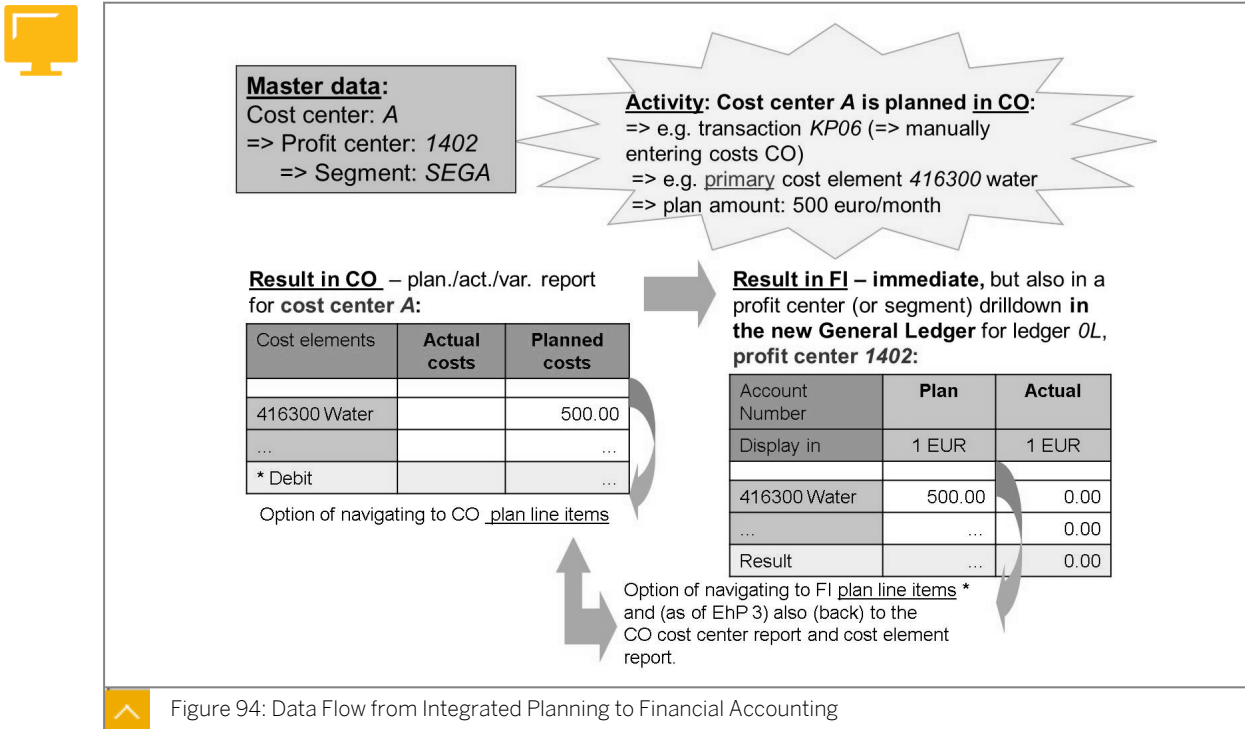
Note:

By default, the system transfers (only) the data records that contain primary costs (primary cost types).

Integrated planning from CO-OM to new General Ledger Accounting (new G/L) works only if the plan versions in FI and Controlling (CO) have the same names. For example, CO plan values from CO plan version 0 are transferred only to FI plan version 0. If you use plan version 1 to plan in CO, you also have to define and assign plan version 1 in FI. You continue using the previous CO planner profile (such as SAPALL) to enter the plan values in CO.

You can also transfer plan data from the CO-PA component (Profitability Analysis) to new G/L. This is not performed online, but by using a (periodic) program run instead. Integrated planning of secondary costs is available in ECC 6.0 with EHP3 and later (or in earlier versions by implementing SAP Note 1009299).

Data Flow from Integrated Planning to Financial Accounting



The example shown in the figure works in new G/L only if the corresponding scenarios are assigned to the ledgers (ledger 0L in the example). Therefore, you need scenario assignments to write plan data to new G/L as well. If you do not assign the scenarios, only the account and plan amount are saved, without any other characteristics (specifically, without a profit center).

Another planning option in the standard system is to write plan line items in new G/L. This means that plan values for an account are not only saved in summary table FAGLFLEXT, but also a plan line item with plan document number is saved for each plan movement in table FAGLFLEXP.

It was not possible to write plan line items in planning in classic General Ledger Accounting. You activate plan line item updates in *Customizing for Financial Accounting (New) under General Ledger Accounting (New) → Planning → Plan Versions → Fiscal-Year-Dependent Version Parameters → Activate Line Items for Planning.*

You can see whether the action was successful in the fiscal year-dependent version parameters.

The advantages of plan line items are as follows:

- Go from plan drilldown reporting to plan line item
- New report for plan line items (with EHP3), transaction code FAGLP03

The output is the same list that is called when you navigate from plan drilldown reporting. When you navigate from drilldown reporting, the list contains aggregated periods. When you call the report directly, you can deselect period aggregation in the selection screen. The period field is then filled in the output as well.

You can check whether the plan document has already been transferred to FI using transaction code FAGL_CO_PLAN.

Integrated Planning in Financial Accounting for Secondary Costs



After activating **business function (FIN_GL_CI_1)** you see this option in Customizing: *

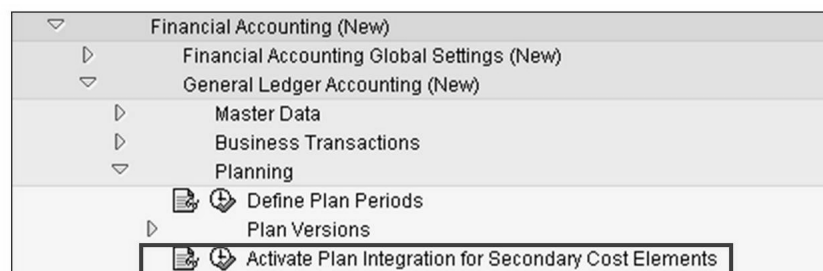


Figure 95: Integrated Planning in Financial Accounting for Secondary Costs

Preparation for activating plan integration for secondary cost elements:

- The secondary cost elements that are used in CO when executing secondary planning processes (such as CO plan assessment, CO plan activity allocation and so on) must have corresponding “reconciliation accounts” in FI. If you have not defined them yet for the corresponding actual processes, you have to do so.
- These “reconciliation accounts” are assigned to the CO planing activities in the account determination for real-time integration CO -> FI (transaction code OK17).

The transaction code and program for activating integrated planning for secondary cost elements is FAGL_PLAN_ACT_SEC.

You can also use program **FAGL_PLAN_ACT_SEC** (and therefore, integrated planning for secondary cost elements) with SAP ERP 2004 or SAP ERP 6.0 release without enhancement packages. See SAP Note 1009299 for more information.



Hint:

The activation of integrated planning for secondary cost elements is valid system-wide.

You define account determination for real-time integration of Controlling with Financial Accounting in *Customizing for Financial Accounting (New)* under *Financial Accounting Global Settings (New)* → *Ledgers* → *Real-Time Integration of Controlling with Financial Accounting* → *Account Determination for Real-Time Integration* → *Define Account Determination for Real-Time Integration*.

When you activate integrated planning for secondary cost elements, secondary plan transactions are also available for selection in account determination for real-time integration of Controlling with Financial Accounting.

Examples of secondary plan transactions are as follows:

- RKP1 – Primary cost planning (always available)
- RKP2 – Activities planning
- RKP3 – Secondary cost planning
- RKPÜ – Plan overhead cost assessment

If the assignment of reconciliation accounts to CO transactions is too general for your purposes, you can use substitution rules to define a more detailed assignment (for example, assignment of reconciliation account for each secondary cost element and not only for each CO transaction).

Integrated Planning in Financial Accounting for Secondary Costs – Data Flow I

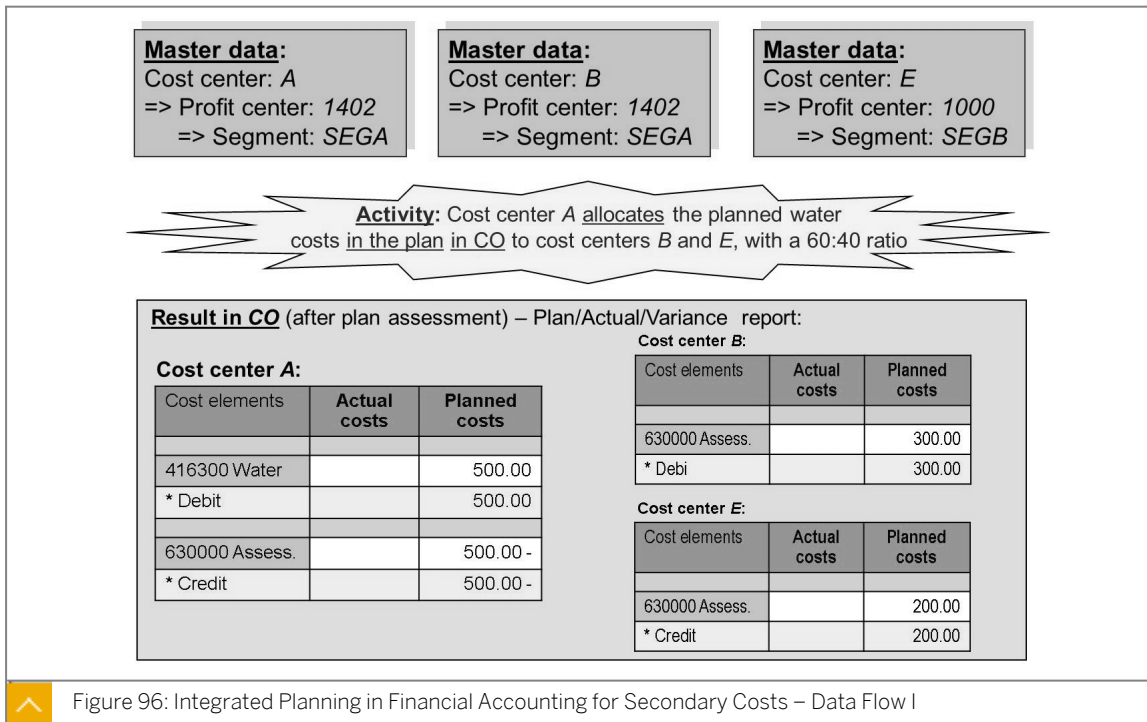


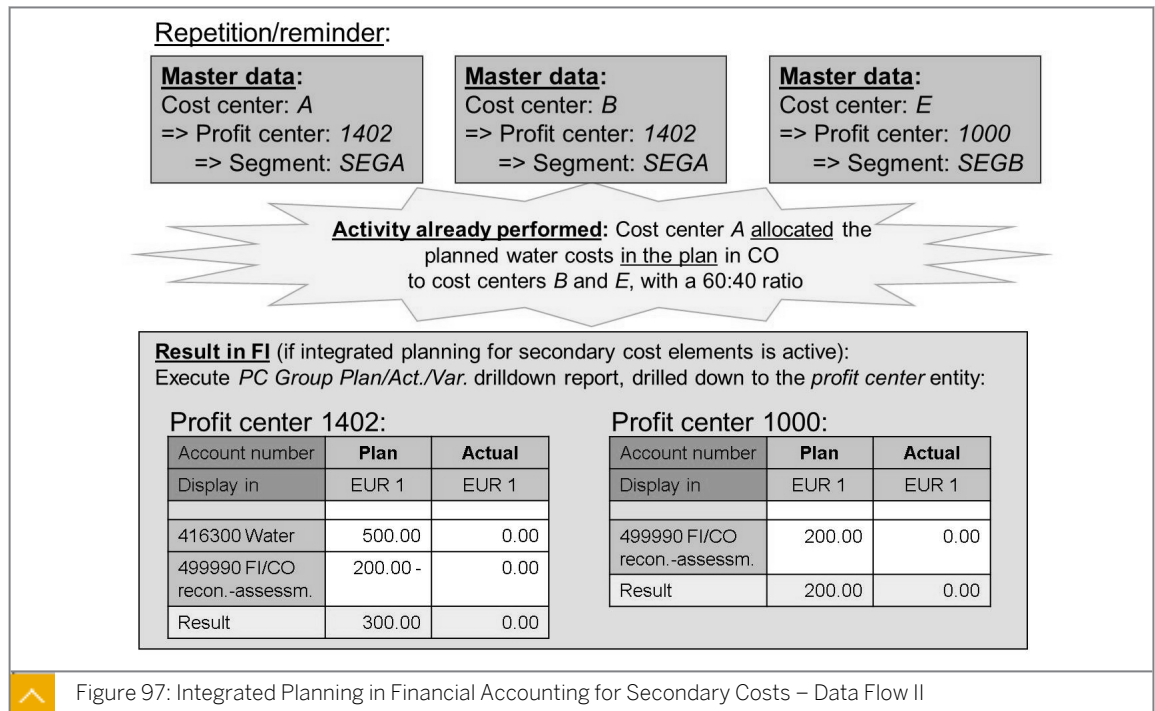
Figure 96: Integrated Planning in Financial Accounting for Secondary Costs – Data Flow I

To start a CO plan assessment, on the SAP Easy Access screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Planning* → *Allocations* → *Assessment*.

The transaction code to create a new CO plan assessment is K_{SU}7.

The transaction code to execute a CO plan assessment is K_{SUB}.

Integrated Planning in Financial Accounting for Secondary Costs – Data Flow II



The following table lists the corresponding FI plan line item for the master data constellation as described:

Account	Amount	Profit Center	Partner Profit Center
499990	300	1402	1402
499990	-300	1402	1402
499990	200	1000	1402
499990	-200	1402	1000

In the depicted drilldown report (available in EHP3 and later), you can also navigate to the cost element characteristic (630000).

Transfer of Plan Data – Classic and New General Ledger Accounting

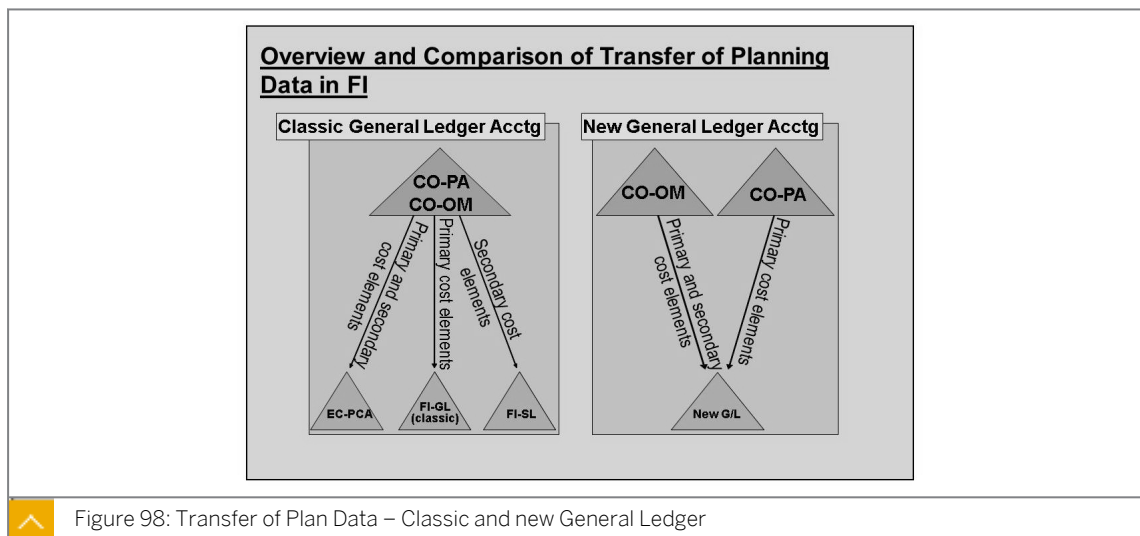


Figure 98: Transfer of Plan Data – Classic and new General Ledger

You can transfer plan data from the following CO components for planning in new G/L:

- CO-OM – Primary and secondary cost elements
- CO-PA – Primary cost elements

Planning for primary and secondary cost elements is saved directly in new G/L. As a result, you no longer have to plan in PCA or in Special Purpose Ledger (FI-SL).



How to Transfer Plan Data from Overhead Cost Controlling

You want to use primary cost planning for cost center planning in profit and loss (P&L) planning in FI and analyze the effects of cost center planning in new G/L. You also want to transfer secondary costs from cost center planning and analyze the effects of cost center planning in reporting for new G/L.

1. Set planner profile SAPALL for cost center planning in CO.
 - a) On the SAP Easy Access screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Planning* → *Set Planner Profile*.
2. Using layout 1-101, plan the following primary costs for the expected administrative expenses in cost center **T611##** (if prompted to enter a controlling area, enter **1000**). Enter the following values on the initial screen:

Field Name or Data Type	Value
Version	0
From Period	1
To Period	12
Fiscal Year	Current fiscal year
Cost Center	T611##
Cost Element	400000
to	410000

Field Name or Data Type	Value
Entry	Free

Choose *Overview Screen* or F5. Enter the following data for cost center T611##:

Account Number	Trans. Currency
403000	24000
410000	6000

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Planning* → *Cost and Activity Inputs* → *Change*.
 - b) On *Change Cost Element/Activity Input Planning: Overview Screen*, enter the plan values as listed in the table.
 - c) Post your data.
3. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
Currency Type	10
Company Code	1000
Ledger	0L
Controlling Area	1000
FIS Annual Rep.Struc	INT
Plan Version	0
Fiscal year	Current fiscal year
From period	1
To period	12
Profit Center	611##

Analyze the planned values and the P&L statement from profit center 611##.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
 - b) On the *Selection: Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table.
 - c) Choose the *Execute* pushbutton.
 - d) On the *Execute Profit Center Grp: Plan/Actual/Variance* screen, the primary costs appear as expenses in the P&L statement of profit center 611##.
4. The administrative cost center uses repair services from the technical service cost center. Enter the corresponding activity input for cost center T611##.

Use layout 1-102 in cost center planning to enter the activity input. Enter the following data:

Field Name or Data Type	Value
Version	0
From period	1
To period	12
Fiscal year	Current fiscal year
Cost Center	T611##
Sender Cost Center	4100
Activity Type	1410
Entry	Form-Based

Choose *Overview Screen* or F5. Enter **60 hours** in the *Plan Fixed Consumption* column, which cost center 611## purchases from cost center 4100 in the form of activity type 1410.

- a) On the *SAP Easy Access* screen, choose *Accounting → Controlling → Cost Center Accounting → Planning → Cost and Activity Inputs → Change*.
 - b) On *Change Cost Element/Activity Input Planning: Initial Screen*, enter the data listed in the table.
 - c) Use layout 1-102 to enter the specified hours.
 - d) Post your data.
5. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
Currency Type	10
Company Code	1000
Ledger	0L
Controlling Area	1000
FIS Annual Rep.Struc	INT
Plan Version	1
Fiscal year	Current fiscal year
From period	1
To period	12
Profit Center	611##

Analyze the planned values of the P&L statement of profit center 611##.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
 - b) On the *Selection Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table.
 - c) Choose the *Execute* pushbutton.
The secondary costs appear on a reconciliation account from profit center *611##*. The secondary costs are transferred to new G/L because integrated planning of secondary cost elements is active. The reconciliation account was configured in account determination for real-time integration.
-

Unit 5

Exercise 10



Integrated Planning

Task 1

You want to use primary cost planning for an administrative cost center for P&L planning in FI.

1. Set planner profile SAPALL for cost center planning in CO.
2. Using layout 1-101, plan the following primary costs for the expected administrative expenses in cost center **T611##** (if prompted to enter a controlling area, enter **1000**). Enter the following values on the initial screen:

Field Name or Data Type	Value
<i>Version</i>	0
<i>From Period</i>	1
<i>To Period</i>	12
<i>Fiscal Year</i>	Current fiscal year
<i>Cost Center</i>	T611##
<i>Cost Element</i>	400000
<i>to</i>	410000
<i>Entry</i>	<i>Free</i>

Choose *Overview Screen* or F5. Enter the following data for cost center **T611##**:

Account Number	Trans. Currency
403000	24000
410000	6000

Task 2

You want to analyze the effects of cost center planning in reporting of the new G/L.

1. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L

Field Name or Data Type	Value
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	611##

Analyze the planned values and the P&L statement from profit center *611##*.

Task 3

You want to transfer secondary costs from cost center planning.

1. The administrative cost center uses repair services from the technical service cost center. Enter the corresponding activity input for cost center **T611##**.

Use layout 1-102 in cost center planning to enter the activity input. Enter the following data:

Field Name or Data Type	Value
<i>Version</i>	0
<i>From period</i>	1
<i>To period</i>	12
<i>Fiscal year</i>	Current fiscal year
<i>Cost Center</i>	T611##
<i>Sender Cost Center</i>	4100
<i>Activity Type</i>	1410
<i>Entry</i>	<i>Form-Based</i>

Choose *Overview Screen* or F5. Enter **60 hours** in the *Plan Fixed Consumption* column, which cost center *611##* purchases from cost center *4100* in the form of activity type *1410*.

Task 4

You want to analyze the effects of cost center planning in reporting for new G/L.

1. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10

Field Name or Data Type	Value
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	1
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	611##

Analyze the planned values of the P&L statement of profit center *611##*.



Integrated Planning

Task 1

You want to use primary cost planning for an administrative cost center for P&L planning in FI.

1. Set planner profile SAPALL for cost center planning in CO.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Planning* → *Set Planner Profile*.
2. Using layout *1-101*, plan the following primary costs for the expected administrative expenses in cost center **T611##** (if prompted to enter a controlling area, enter **1000**). Enter the following values on the initial screen:

Field Name or Data Type	Value
<i>Version</i>	0
<i>From Period</i>	1
<i>To Period</i>	12
<i>Fiscal Year</i>	Current fiscal year
<i>Cost Center</i>	T611##
<i>Cost Element</i>	400000
<i>to</i>	410000
<i>Entry</i>	<i>Free</i>

Choose *Overview Screen* or F5. Enter the following data for cost center *T611##*:

Account Number	Trans. Currency
403000	24000
410000	6000

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Planning* → *Cost and Activity Inputs* → *Change*.
- b) On *Change Cost Element/Activity Input Planning: Overview Screen*, enter the plan values as listed in the table.
- c) Post your data.

Task 2

You want to analyze the effects of cost center planning in reporting of the new G/L.

- Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc</i>	INT
<i>Plan Version</i>	0
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center</i>	611##

Analyze the planned values and the P&L statement from profit center 611##.

- On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- On the *Selection: Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table.
- Choose the *Execute* pushbutton.
- On the *Execute Profit Center Grp: Plan/Actual/Variance* screen, the primary costs appear as expenses in the P&L statement of profit center 611##.

Task 3

You want to transfer secondary costs from cost center planning.

- The administrative cost center uses repair services from the technical service cost center. Enter the corresponding activity input for cost center **T611##**.

Use layout 1-102 in cost center planning to enter the activity input. Enter the following data:

Field Name or Data Type	Value
<i>Version</i>	0
<i>From period</i>	1
<i>To period</i>	12
<i>Fiscal year</i>	Current fiscal year
<i>Cost Center</i>	T611##
<i>Sender Cost Center</i>	4100

Field Name or Data Type	Value
Activity Type	1410
Entry	Form-Based

Choose *Overview Screen* or F5. Enter **60 hours** in the *Plan Fixed Consumption* column, which cost center 611## purchases from cost center 4100 in the form of activity type 1410.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Planning* → *Cost and Activity Inputs* → *Change*.
- b) On *Change Cost Element/Activity Input Planning: Initial Screen*, enter the data listed in the table.
- c) Use layout 1-102 to enter the specified hours.
- d) Post your data.

Task 4

You want to analyze the effects of cost center planning in reporting for new G/L.

1. Go to the information system for new G/L, call the report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
Currency Type	10
Company Code	1000
Ledger	0L
Controlling Area	1000
FIS Annual Rep.Struc	INT
Plan Version	1
Fiscal year	Current fiscal year
From period	1
To period	12
Profit Center	611##

Analyze the planned values of the P&L statement of profit center 611##.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
- b) On the *Selection Profit Center Grp: Plan/Actual/Variance* screen, enter the data listed in the table.
- c) Choose the *Execute* pushbutton.

The secondary costs appear on a reconciliation account from profit center 611##. The secondary costs are transferred to new G/L because integrated planning of secondary cost elements is active. The reconciliation account was configured in account determination for real-time integration.



LESSON SUMMARY

You should now be able to:

- Understand planning integration



Learning Assessment

1. It is possible to plan secondary processes (such as activities) directly from Financial Accounting.

Determine whether this statement is true or false.

True

False

2. Integrated planning from Overhead Cost Controlling to new General Ledger Accounting works only if the plan versions in Financial Accounting and Controlling have _____.

Choose the correct answer.

A different names

B no names

C the same names



Learning Assessment - Answers

1. It is possible to plan secondary processes (such as activities) directly from Financial Accounting.

Determine whether this statement is true or false.

True

False

2. Integrated planning from Overhead Cost Controlling to new General Ledger Accounting works only if the plan versions in Financial Accounting and Controlling have _____.

Choose the correct answer.

A different names

B no names

C the same names

Lesson 1

Using Drilldown Reports Delivered in the Standard System

246

Exercise 11: Execute Standard Drilldown Reports

255



UNIT OBJECTIVES

- Execute drilldown reports

Unit 6

Lesson 1



Using Drilldown Reports Delivered in the Standard System

LESSON OVERVIEW

This lesson shows you how to execute standard drilldown reports in Profit Center Accounting (PCA).

Business Example

You have a clear understanding of the actual and plan data flows in PCA. You now want to analyze the plan/actual comparisons of the profit centers you are responsible for by using drilldown reports. In addition, you want to drill down to the originating documents. For this reason, you require the following knowledge:

- How to execute drilldown reports



Explain the content from a business perspective using the technical settings in the system.



LESSON OBJECTIVES

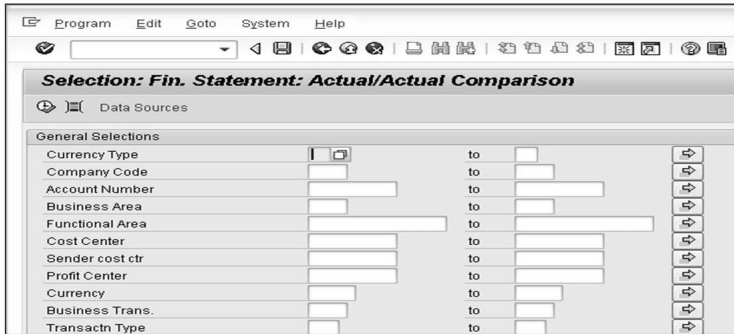
After completing this lesson, you will be able to:

- Execute drilldown reports

Standard Delivered Drilldown Reports



Use a standard drilldown report to display a financial statement



The screenshot shows a SAP program window titled 'Selection: Fin. Statement: Actual/Actual Comparison'. The window has a menu bar with 'Program', 'Edit', 'Goto', 'System', and 'Help'. Below the menu bar is a toolbar with various icons. The main area is titled 'Data Sources' and contains a 'General Selections' section. This section lists various selection criteria with input fields and 'to' indicators, and a column of navigation icons on the right. The selection criteria listed are: Currency Type, Company Code, Account Number, Business Area, Functional Area, Cost Center, Sender cost ctr, Profit Center, Currency, Business Trans., and Transactn Type.

Figure 99: Financial Statements

In the drilldown reports, you can simplify the entry work significantly by creating suitable program variants.

The drilldown report is available directly above program RFBILA00. To access this report, on the SAP Easy Access screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Financial Statement/Cash*

Flow → General → Actual/Actual Comparisons → Financial Statement: Actual/Actual Comparison.

Advantages of drilldown reporting compared to program RFBILA00:

- Drilldown reporting is much more flexible than the existing ABAP program.
- Selections by standard characteristics (such as profit center, business area, functional area, segment, company code, account number, and partner objects) are visible immediately in the entry screen.

Financial Statement – Actual/Actual Comparison (Classic)



Classic Drilldown Report:

Report Edit Goto Navigate Extras Settings System Help

Execute 0SAPBSPL-01: Overview

Navigation: Profit Center, Account number, Segment, Functional Area

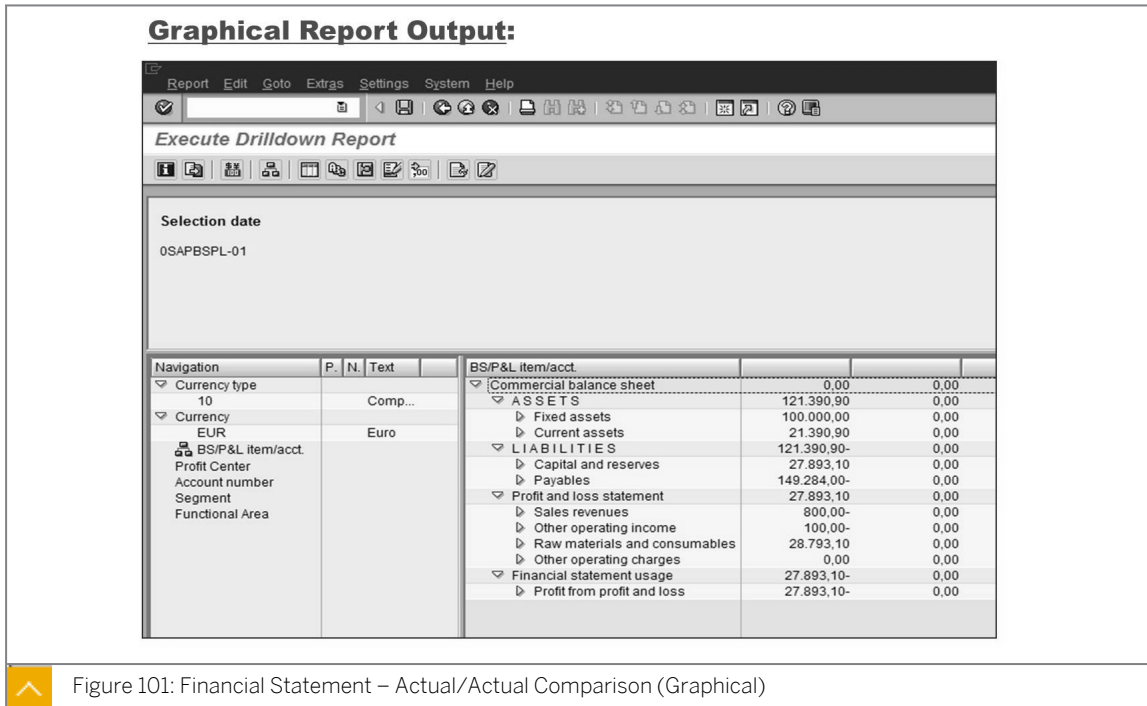
Currency type: 10, Currency: EUR, Company code: Euro

BS/P&L item/acct.		
Commercial balance sheet	0,00	0,00
ASSETS	121.390,90	0,00
Fixed assets	100.000,00	0,00
Current assets	21.390,90	0,00
LIABILITIES	121.390,90-	0,00
Capital and reserves	27.893,10	0,00
Payables	149.284,00-	0,00
Profit and loss statement	27.893,10	0,00
Sales revenues	800,00-	0,00
Other operating income	100,00-	0,00
Raw materials and consumables	28.793,10	0,00
Other operating charges	0,00	0,00
Financial statement usage	27.893,10-	0,00

Figure 100: Financial Statement – Actual/Actual Comparison

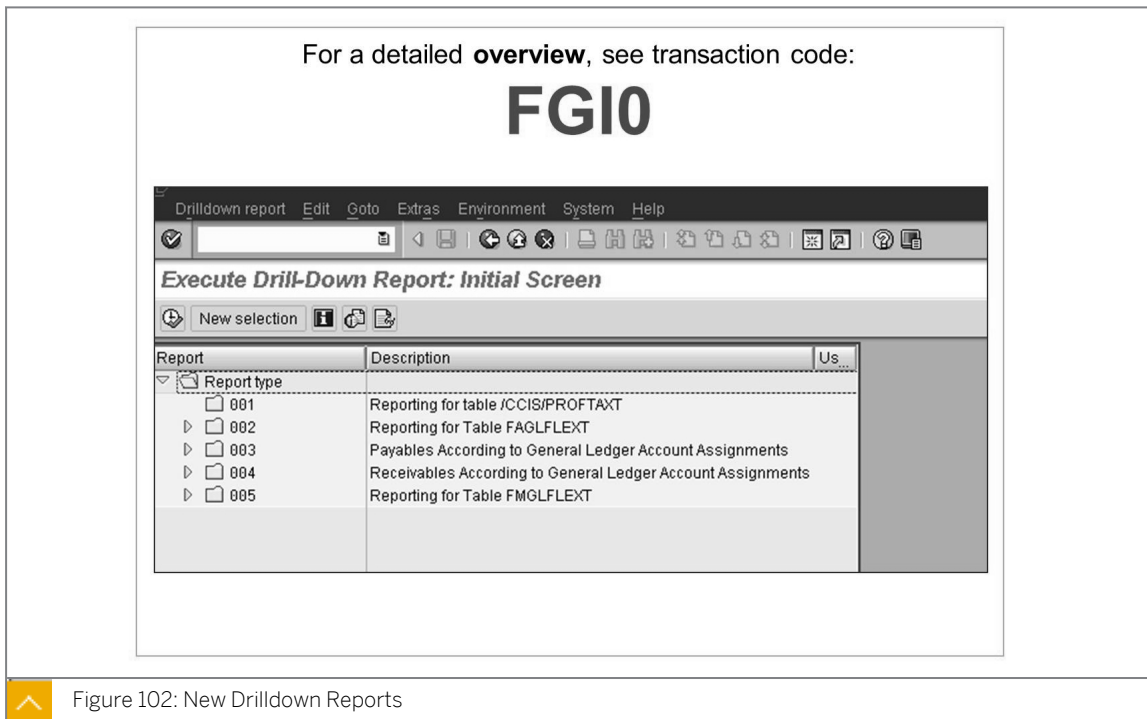
You can choose to call the drilldown report in the classic or graphical layout in the selection screen for the report.

Financial Statement – Actual/Actual Comparison (Graphical)



If the selection is identical, the results are also identical.

New Drilldown Reports



The flexibility of drilldown reports enables you to navigate using a wide range of characteristics.



The following navigation characteristics are available by default:

- Profit center
- Account number
- Segment
- Functional area
- Other characteristics, such as business area, cost center, or customer fields

You can navigate through drilldown reports to turn financial statements for a company code, for example, into segment financial statements (keyword: segment reporting) or profit center financial statements.



Hint:

You can navigate in both, classic and graphical drilldown reporting.

The drilldown reports are so flexible that they allow you to drill down to individual Financial Accounting (FI) documents.

To do this, use the report/report interface on the results screen, choose *Line Items*, and double-click a document number to retrieve the corresponding FI document.

SAP ERP contains, in addition to the financial statement drilldown reporting, also other FI drilldown reports. Transaction `FGIO` lists the defined program variants that you can execute.

New Drilldown Reports for Profit Centers and Segments



Report	Description
Report type	
001	Reporting for table /CCIS/PROFTAXT
002	Reporting for Table FAGLFLEXT
0SAPBLNCE - 01	G/L Account - Balances
0SAPBSPL - 01	Fin. Statement: Actual/Actual Comparison
0SAPBSPL - 02	Fin. Statement: Plan/Actual Comparison
0SAPBSPL - 03	Profit Center Grp: Plan/Actual/Variance
0SAPBSPL - 04	Profit Center Group: Plan/Plan/Actual
0SAPBSPL - 05	Profit Center Group: Key Figures
0SAPBSPL - 06	Profit Center Comparison: ROI
0SAPBSPL - 13	Segment: Plan/Actual/Variance
0SAPBSPL - 14	Segment: Plan/Plan/Actual
0SAPBSPL - 15	Segment: Key Figures
0SAPBSPL - 16	Segment Comparison: ROI
0SAPFS10 - 01	Transaction Figures: Account Balance
0SAPSTKYF - 01	Statistical Key Figures (Example)
003	Payables According to General Ledger Account Assignm
004	Receivables According to General Ledger Account Ass
005	Reporting for Table FMGLFLEXT

Special features for new drilldown reports available in EHP 3 – older reports remain unchanged:

- The *PC Group* selection field (hierarchy selection)
- The *cost element* navigation characteristic
- Direct navigation to several CO reports

Figure 103: New Drilldown Reports for Profit Centers and Segments

If you only see five drilldown reports in the report type 002 (reporting for table FAGLFLEXT) after installing Enhancement Package 3 (EHP3), import the new drilldown reports from the client 000 first.

To import the new reports, execute transaction `FGIO` and perform the following steps:

1. Choose *Environment* → *Import Reports* → *Execute*.
2. On the screen that appears, choose *Reporting* for the table FAGLFLEXT. The new reports appear.
3. Choose all the reports and execute them in the background.

After you activate the business function FIN_GL_CI_1, the new drilldown reports in EHP3 are also available on the *SAP Easy Access* screen in the information system for the general ledger. You can find them in the *General Ledger Reports (New)* folder. They include a new report or program (FAGL_PLAN_ITEMS_GL) for reading plan line items.

To display plan line items, on the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *General Ledger Reports (New)* → *Line Items* → *Display Plan Line Items* (transaction code FAGLP03).

EHP3 also features a migration tool for transferring Report Writer and/or Report Painter reports you used based on the table GLPCT [summary table from classic Profit Center Accounting (EC-PCA)] to new G/L. You can transfer and run these reports based on the table FAGLFLEXT in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Information System* → *Report Writer/Report Painter Reports* → *Transfer of Reports from Profit Center Accounting* → *Transfer Reports* (transaction code FAGL_RMIGR).

Payables and Receivables



G/L	Payables in LC
INT /160000 AP-domestic	126.500,00-
Result	126.500,00-

For a drilldown by profit center and/or other characteristics, see the next figure. →

Figure 104: Payables and Receivables

The general ledger account assignments of the standard drilldown reports are profit center and segment. You select the ledger on the selection screen for the report. The requirement for this drilldown report comes from EC-PCA, which makes it possible to break down accounts into payables and receivables by profit center using report groups 8A98 (Profit Center: Receivables) and 8A99 (Profit Center: Payables), after you transfer the values to PCA.

In addition to displaying your (open) payables and receivables in the line item display of the subledgers (transaction code FBL1N and FBL5N), you can also use (four) standard drilldown reporting.

These drilldown reports make it easy to break figures down by subledger and general ledger account assignments at once, for example, to analyze the profit center or segment characteristic for vendors and customers.

To find these drilldown reports, on the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Line Items* → *Open Items* →

Drilldown Examples

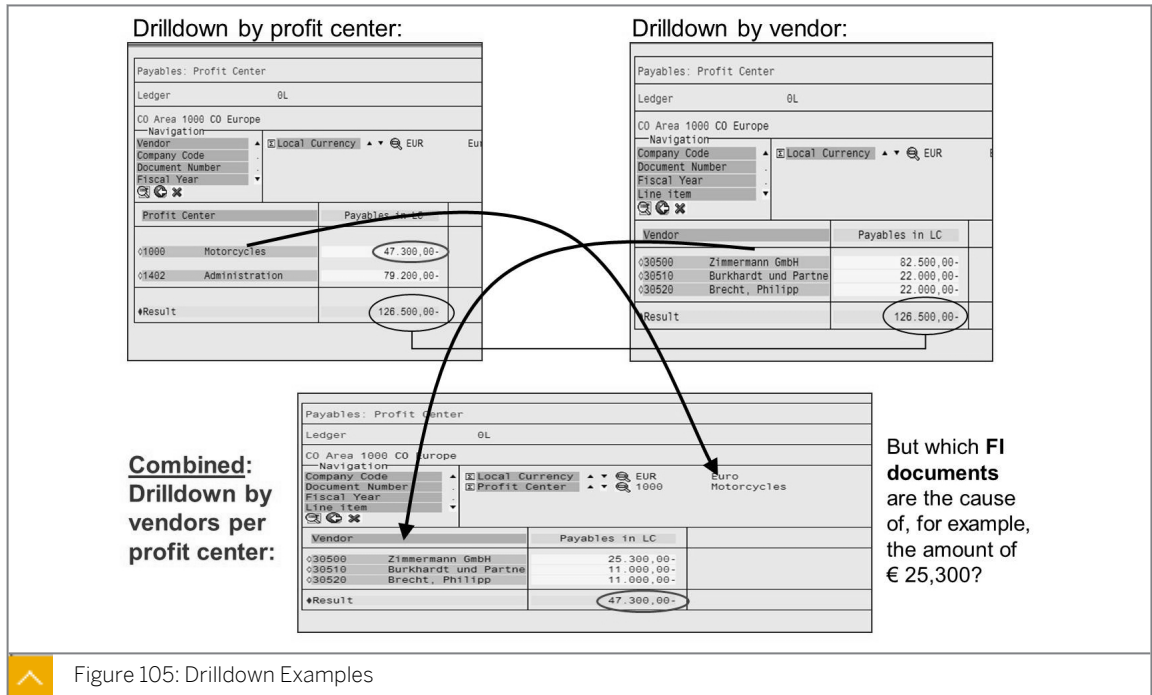


Figure 105: Drilldown Examples

You can also select a single vendor and break it down by profit center.



Note:
The figure displays the classic output type.

Navigation Characteristic – Origin Object

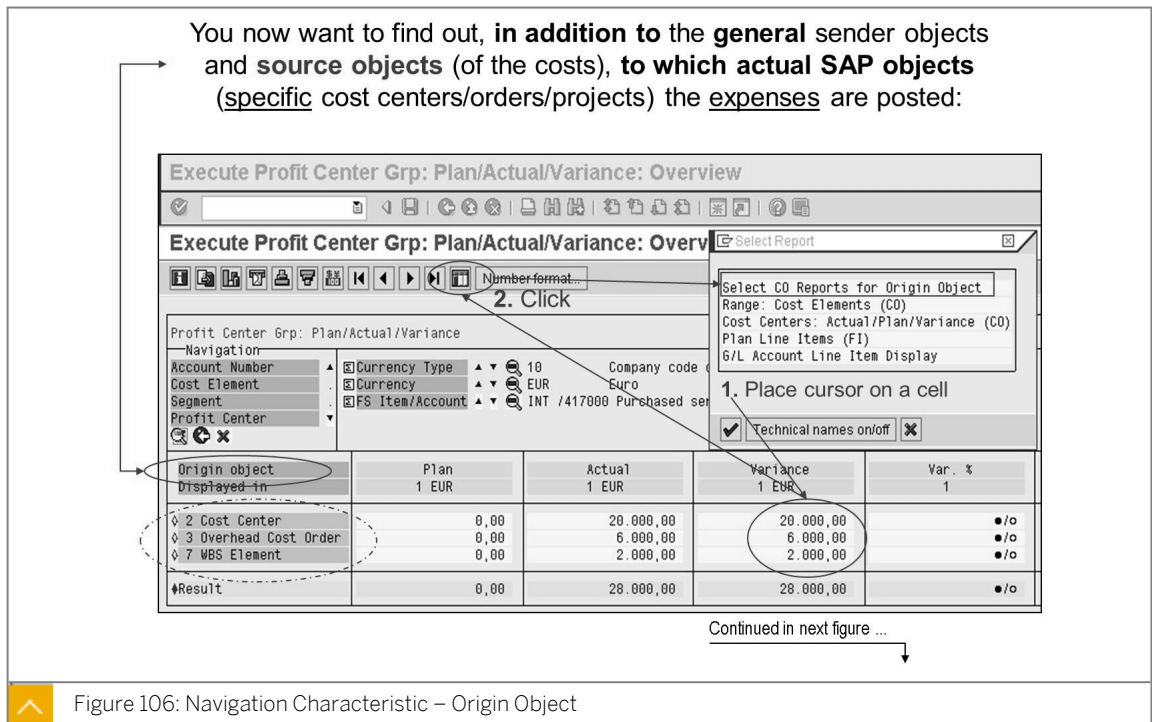


Figure 106: Navigation Characteristic – Origin Object

To use the origin object characteristic, you first have to extend the summary table FAGLFLEXT with the standard field *Type of origin object (EC-PCA)*, (field name ZZHOART), and then assign the field at least to one ledger.



Hint:
This enhancement is available in EHP3, business function FIN_GL_CI_1.

If you want to evaluate the origin object characteristic in the standard drilldown reports, make it available as a characteristic for selection.

To enable navigation to Controlling (CO) reports of the origin objects through a report-report interface (RRI), assign the ABAP program FAGL_RRI_RECON_CO in the drilldown report definition. To do this, execute transaction FGI0, select a report, and switch to change mode. Next, choose the *Options* tab page and then choose the *Report Assignment* pushbutton.



Hint:
Program FAGL_RRI_RECON_CO is only available in EHP4, business function FIN_GL_CI_2.

Report-Report Interface for Controlling Reconciliation



... depending on the line/object from where you call the report-report interface (RRI), different (**target/receiver**) reports (of [overhead cost] controlling) appear – In the example shown, the **RRI is called for the overhead order object: EUR 6,000 for account 417000** – see figure before ...

The screenshot shows the 'Select Receiver Report' dialog box with the following table:

Description	Ty.	Receiver Report
Orders: Actual/Plan/Variance	RW	6000
Orders: Current period/cumulative	RW	6006
List: Orders by Cost Element	RW	6M01
List: Cost Elements by Order	RW	6M00

Below the dialog, the 'Cost Elements' table is displayed with the following data:

Cost elements	Actual	Plan
417000 Purchased services	6.000,00	
* Costs	6.000,00	
** Balance	6.000,00	

Result: You can see that the expenses in the amount of EUR 6,000 were assigned to **two internal orders** (orders 100299 and 100319). You also can display these orders individually.

Figure 107: Report-Report Interface for Controlling Reconciliation

The displayed receiver reports are the linked standard reports for overhead orders. To call these receiver reports for the overhead order object (and for the other standard CO objects available) from the RRI, load or activate them. You change RRI for reconciliation with controlling in *Customizing for Financial Accounting (New)* under *General Ledger Accounting (New)* → *Information System* → *Drilldown Reports (G/L Accounts)* → *Report-Report Interface for CO Reconciliation* → *Change Report-Report Interface for Reconciliation with Controlling*.



Hint:
This path is available in EHP4, business function FIN_GL_CI_2.



How to Execute Drilldown Reports

You want to analyze accounts receivable postings at profit center level.

1. Call the *Receivables: Profit Center* drilldown report and enter the following data:

Field Name or Data Type	Value
<i>Customer Account</i>	T-CSD00 to T-CSD25
<i>Company Code</i>	1000
<i>Open on Key Date</i>	Today's date
<i>CO Area</i>	1000
<i>Hier:Profit Center</i>	AC612
<i>Output Type</i>	<i>Classic drilldown report</i>

You see all the receivables on the screen.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Line Items* → *Open Items* → *Receivables: Profit Center*.
 - b) On the *Selection: Receivables: Profit Center* screen, enter the data listed in the table.
 - c) Choose the *Execute* pushbutton.
 - d) On the *Execute Receivables: Profit Center: Overview* screen, view the displayed results.
2. Drill down this amount with the profit center characteristic.
 - a) Choose the *Profit Center* characteristic and then select the line with account 140000.
 3. Display the customer for profit center 612##.
 - a) Choose the *Customer* characteristic and then select the line with profit center 612##.
 4. Display the document numbers for customer T-CSD##.
 - a) Choose the *Document Number* characteristic and then select the line with customer T-CSD##.

Unit 6

Exercise 11



Execute Standard Drilldown Reports

Business Example

You are examining the ease of use and analysis options available in the profit center reports in new G/L.

Task 1

You want to analyze accounts receivable postings at profit center level.

1. Call the *Receivables: Profit Center* drilldown report and enter the following data:

Field Name or Data Type	Value
<i>Customer Account</i>	T-CSD00 to T-CSD25
<i>Company Code</i>	1000
<i>Open on Key Date</i>	Today's date
<i>CO Area</i>	1000
<i>Hier:Profit Center</i>	AC612
<i>Output Type</i>	<i>Classic drilldown report</i>

You see all the receivables on the screen.

2. Drill down this amount with the profit center characteristic.
3. Display the customer for profit center 612##.
4. Display the document numbers for customer T-CSD##.

Task 2

You want to analyze accounts payable postings at profit center level.

1. Call the *Payables: Profit Center* report and enter the following data:

Field Name or Data Type	Value
<i>Vendor Account</i>	T-K500A00 to T-K500A25 and 1000
<i>Company Code</i>	1000
<i>Open on Key Date</i>	Today's date
<i>CO Area</i>	1000
<i>Hier:Profit Center</i>	AC612

Field Name or Data Type	Value
<i>Output Type</i>	<i>Classic drilldown report</i>

You see all the payables on the screen.

2. Drill down this amount with the profit center characteristic.
3. Display the vendors for profit center *611##*.
4. Display the document numbers for vendor *T-K500A##*.
5. From this view, display the document numbers for vendor *1000*.

Task 3



Note:
This is an optional exercise.

You want to examine the functions of standard drilldown reports with the *Classic drilldown report* output type.

1. Go to the information system for general ledger accounting, call the drilldown report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc.</i>	INT
<i>Plan Version</i>	0
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center Group</i>	GROUP##
<i>Output Type</i>	<i>Classic drilldown report</i>

2. In the profit and loss (P&L) statement, navigate down to account *Sales revenues - domestic - finished goods*. You want to see both the names and keys of the accounts. Display the keys and names for the hierarchy.
3. You find it too complicated to navigate within the hierarchy of the financial statements. You want to see a flat list of account numbers instead of the hierarchy.
4. Display the hierarchy again.

5. You want to change the sequence of the navigation characteristics. You want the characteristics *FS Item/Account*, *Profit Center*, and *Partner Profit Center* to appear at the top of the list. You can arrange the other characteristics in the order you want.
6. You want to switch the view of the financial statement structure with the view of profit center group *GROUP##*.
7. You want to see the balance sheet and P&L structure for profit center *612##*.
8. Analyze sales on account 800000. Display the corresponding line items in FI and navigate down to the source document. Then return to the original report.
9. You want to see only *Inventory Changes (3020000)* as part of the hierarchy. Restrict the hierarchy view accordingly.
10. You want to analyze the account for *Semi-Finished products consumed (890000)* in more detail. It was posted to when the goods issue was charged to the production order. Which is the partner profit center?

Task 4



Note:
This is an optional exercise.

You want to examine the functions of standard drilldown reports using the output type *Graphical Report Output*.

1. Go to the information system for *General Ledger Accounting*, call the drilldown report *Profit Center Group: Plan/Actual/Variance*, enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc.</i>	INT
<i>Plan Version</i>	0
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center Group</i>	GROUP##
<i>Output Type</i>	<i>Graphical report output</i>

2. In the P&L statement, navigate down to the account *Sales revenues - domestic - finished goods*. You want to see both the names and keys of the accounts. Display the keys and names for the hierarchy.

3. You find it too complicated to navigate within the hierarchy of the financial statements. You want to see a flat list of account numbers instead of the hierarchy.
4. Display the hierarchy again.
5. You want to switch the view of the financial statement structure with the view of profit center group *GROUP##*.
6. You want to see the balance sheet and P&L structure for profit center *612##*.
7. Analyze sales on account *800000*. Display the corresponding line items in FI and navigate down to the original document. Then, return to the original report.
8. You want to see only *Inventory Changes (3020000)* as part of the hierarchy. Restrict the hierarchy view accordingly.
9. You want to analyze the account for *Semi-Finished products consumed (890000)* in more detail, which was posted to during the goods issue charged to the production order. Which is the partner profit center?



Execute Standard Drilldown Reports

Business Example

You are examining the ease of use and analysis options available in the profit center reports in new G/L.

Task 1

You want to analyze accounts receivable postings at profit center level.

1. Call the *Receivables: Profit Center* drilldown report and enter the following data:

Field Name or Data Type	Value
<i>Customer Account</i>	T-CSD00 to T-CSD25
<i>Company Code</i>	1000
<i>Open on Key Date</i>	Today's date
<i>CO Area</i>	1000
<i>Hier:Profit Center</i>	AC612
<i>Output Type</i>	<i>Classic drilldown report</i>

You see all the receivables on the screen.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Line Items* → *Open Items* → *Receivables: Profit Center*.
 - b) On the *Selection: Receivables: Profit Center* screen, enter the data listed in the table.
 - c) Choose the *Execute* pushbutton.
On the *Execute Receivables: Profit Center: Overview* screen, the customer receivables are displayed.
2. Drill down this amount with the profit center characteristic.
 - a) Choose the *Profit Center* characteristic and then select the line with account 140000.
 3. Display the customer for profit center 612##.
 - a) Choose the *Customer* characteristic and then select the line with profit center 612##.
 4. Display the document numbers for customer T-CSD##.
 - a) Choose the *Document Number* characteristic and then select the line with customer T-CSD##.

Task 2

You want to analyze accounts payable postings at profit center level.

1. Call the *Payables: Profit Center* report and enter the following data:

Field Name or Data Type	Value
Vendor Account	T-K500A00 to T-K500A25 and 1000
Company Code	1000
Open on Key Date	Today's date
CO Area	1000
Hier:Profit Center	AC612
Output Type	<i>Classic drilldown report</i>

You see all the payables on the screen.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Line Items* → *Open Items* → *Payables: Profit Center*.
 - b) On the *Selection: Payables Profit Center* screen, enter the data listed in the table.
 - c) Choose the *Execute* pushbutton.
 - d) On the *Execute Payables:Profit Center: Overview* screen, the vendor payables are displayed.
2. Drill down this amount with the profit center characteristic.
 - a) Choose the *Profit Center* characteristic and then select the line with account 160000.
 3. Display the vendors for profit center 611##.
 - a) Choose the *Vendor* characteristic and then select the line with profit center 611##. Postings have been made to vendors 1000 and T-K500A##.
 4. Display the document numbers for vendor T-K500A##.
 - a) Choose the *Document Number* characteristic and then select the line with customer T-K500A##.
 5. From this view, display the document numbers for vendor 1000.
 - a) Choose the *Display Document* pushbutton and choose vendor 1000 from the selection list.

Task 3



Note:
This is an optional exercise.

You want to examine the functions of standard drilldown reports with the *Classic drilldown report* output type.

1. Go to the information system for general ledger accounting, call the drilldown report *Profit Center Group: Plan/Actual/Variance*, and enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc.</i>	INT
<i>Plan Version</i>	0
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center Group</i>	GROUP##
<i>Output Type</i>	<i>Classic drilldown report</i>

- a) On the *SAP Easy Access* screen, choose *Accounting → Financial Accounting → General Ledger → Information System → General Ledger Reports (New) → Reports for Profit Center Accounting → Profit Center Group: Plan/Actual/Variance*.
 - b) On the *Selection Profit Center Grp: Plan/Actual/Variance* screen, enter the values listed in the table.
 - c) Choose the *Execute* pushbutton. The display screen for the report *Profit Center Group: Plan/Actual/Variance* appears.
You see the FIS annual reporting structure INT for profit center group GROUP##.
2. In the profit and loss (P&L) statement, navigate down to account *Sales revenues - domestic - finished goods*. You want to see both the names and keys of the accounts. Display the keys and names for the hierarchy.
 - a) On the *Execute Profit Center Grp: Plan/Actual/Variance* screen, choose *Settings → Characteristic Display*.
 - b) In the *Display Characteristics: All Characteristics* dialog box, select the *Key and name* radio button and choose *Continue*.
You now also see account number 800000.
 3. You find it too complicated to navigate within the hierarchy of the financial statements. You want to see a flat list of account numbers instead of the hierarchy.
 - a) Choose *Edit → Hierarchy → Selection*.
 - b) In the *Choose hierarchy: FS Item/Account* dialog box, choose *No Hierarchy* and then choose *Continue*.
You now see a list of account numbers without a hierarchy.
 4. Display the hierarchy again.
 - a) Choose *Edit → Hierarchy → Select* and choose *INT hierarchy*. The hierarchy appears again.
 - b) Choose *Edit → Hierarchy → Select*. Choose *Financial Statement Version* and enter **INT**. Choose *Continue*.

5. You want to change the sequence of the navigation characteristics. You want the characteristics *FS Item/Account*, *Profit Center*, and *Partner Profit Center* to appear at the top of the list. You can arrange the other characteristics in the order you want.
 - a) Choose *Navigate* → *Sort Characteristics*.
 - b) In the *Sort Characteristics* dialog box, enter the sequence of numbers accordingly.
6. You want to switch the view of the financial statement structure with the view of profit center group *GROUP##*.
 - a) Choose the *Profit Center* field and then choose the *FS Item/Account* field. You see the administration and production profit centers in *GROUP##*.
7. You want to see the balance sheet and P&L structure for profit center *612##*.
 - a) Choose *FS Item/Account* (you may have to scroll down to see it) and select the line with profit center *612##*. You see the financial statement for profit center *612##*.
8. Analyze sales on account 800000. Display the corresponding line items in FI and navigate down to the source document. Then return to the original report.
 - a) Drill down the hierarchy to account 800000. Position the cursor on actual sales and choose *Goto* → *Call up report...*
 - b) Double-click the *G/L Account Line Item Display* report.
 - c) From the line item list, choose *Environment* → *Display Document*.
 - d) On the *Display Document: Line Item 001* screen, choose *Goto* → *Document Overview* to display the full document.
 - e) On the *Display Document: Data Entry View* screen, choose *Environment* → *Document Environment* → *Original Document* to display the billing document from *R-F1##*. Then return to the original report.
9. You want to see only *Inventory Changes (3020000)* as part of the hierarchy. Restrict the hierarchy view accordingly.
 - a) Click the node for *Inventory Changes (3020000)*. Choose *Navigate* → *Hierarchy* → *Set focus*.
10. You want to analyze the account for *Semi-Finished products consumed (890000)* in more detail. It was posted to when the goods issue was charged to the production order. Which is the partner profit center?
 - a) Choose the *Partner PC* navigation characteristic. Select the line with the account *Semi-Finished products consumed (890000)*. The partner profit center is *1010*.



Hint:

The partner profit center comes from the material master of semifinished products for pump *R-F1##*. The material numbers are *R-B1##*, *R-B2##*, *R-B3##*, and *R-B4##*.

Task 4



Note:
This is an optional exercise.

You want to examine the functions of standard drilldown reports using the output type *Graphical Report Output*.

1. Go to the information system for *General Ledger Accounting*, call the drilldown report *Profit Center Group: Plan/Actual/Variance*, enter the following data:

Field Name or Data Type	Value
<i>Currency Type</i>	10
<i>Company Code</i>	1000
<i>Ledger</i>	0L
<i>Controlling Area</i>	1000
<i>FIS Annual Rep.Struc.</i>	INT
<i>Plan Version</i>	0
<i>Fiscal year</i>	Current fiscal year
<i>From period</i>	1
<i>To period</i>	12
<i>Profit Center Group</i>	GROUP##
<i>Output Type</i>	<i>Graphical report output</i>

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Information System* → *General Ledger Reports (New)* → *Reports for Profit Center Accounting* → *Profit Center Group: Plan/Actual/Variance*.
 - b) On the *Selection Profit Center Grp: Plan/Actual/Variance* screen, enter the values listed in the table.
 - c) Choose the *Execute* pushbutton.
 - d) In the *Drilldown report* dialog box, select the *New selection* radio button.
 - e) Choose *Continue*.
You see the FIS annual reporting structure INT for profit center group GROUP##.
2. In the P&L statement, navigate down to the account *Sales revenues - domestic - finished goods*. You want to see both the names and keys of the accounts. Display the keys and names for the hierarchy.
 - a) On the *Execute Drilldown Report Profit Center Grp: Plan/Actual/Variance* screen, choose *Settings* → *Characteristic Display*.
 - b) In the *Display Characteristics: All Characteristics* dialog box, select the *Key and name* radio button and choose *Continue*.
You now also see account number 800000.

3. You find it too complicated to navigate within the hierarchy of the financial statements. You want to see a flat list of account numbers instead of the hierarchy.
 - a) Choose *Edit* → *Hierarchy selection*.
 - b) In the *Choose hierarchy: FS Item/Account* dialog box, choose *No Hierarchy* and then choose *Continue*.

You now see a list of account numbers without a hierarchy.
4. Display the hierarchy again.
 - a) Choose *Edit* → *Hierarchy* → *Select*.
 - b) In the *Choose hierarchy: FS Item/Account* dialog box, choose *Financial Statement Version* and enter **INT**.
 - c) Choose *Continue*.

The hierarchy appears again.
5. You want to switch the view of the financial statement structure with the view of profit center group *GROUP##*.
 - a) Double-click the *Profit Center* field. You see the administration and production profit center in *GROUP##*. Expand *Group##*.
6. You want to see the balance sheet and P&L structure for profit center *612##*.
 - a) Drag the profit center *612##* to the *FS Item/Account* navigation characteristic. You see the financial statement for profit center *612##*.
7. Analyze sales on account *800000*. Display the corresponding line items in FI and navigate down to the original document. Then, return to the original report.
 - a) Drill down the hierarchy to account *800000*. Position the cursor on actual sales and choose *Goto* → *Call up report...*
 - b) In the *Select Report* dialog box, double-click the *G/L Account Line Item Display* report.
 - c) Choose *Continue*.
 - d) From the line item list, choose *Environment* → *Display Document*.
 - e) On the *Display Document: Line Item 001* screen, choose *Goto* → *Document Overview* to display the full document.
 - f) On the *Display Document: Data Entry View* screen, choose *Environment* → *Document Environment* → *Original Document* to display the billing document from *R-F1##*.

Then return to the original report.
8. You want to see only *Inventory Changes (3020000)* as part of the hierarchy. Restrict the hierarchy view accordingly.
 - a) Click the node for *Inventory Changes (3020000)*. Choose the *Hierarchy...* pushbutton and then the *Set Focus* pushbutton. You now see only the inventory changes.
9. You want to analyze the account for *Semi-Finished products consumed (890000)* in more detail, which was posted to during the goods issue charged to the production order. Which is the partner profit center?
 - a) Drag *Semi-Finished products consumed (890000)* to the *Partner Profit Center Navigation* characteristic. The partner profit center is *1010*.



Hint:

The partner profit center comes from the material master of semifinished products for pump *R-F1##*. The material numbers are *R-B1##*, *R-B2##*, *R-B3##*, and *R-B4##*.



LESSON SUMMARY

You should now be able to:

- Execute drilldown reports



Learning Assessment

1. Which of the following are the general ledger account assignments of the standard drilldown reports?

Choose the correct answers.

- A Profit center
- B Cost center
- C Segment
- D Internal order



Learning Assessment - Answers

1. Which of the following are the general ledger account assignments of the standard drilldown reports?

Choose the correct answers.

- A Profit center
- B Cost center
- C Segment
- D Internal order

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UNIT OBJECTIVES

- Describe the terminology, methods, and views of profitability management
- Define the flow of the actual values in Profitability Analysis and Profit Center Accounting
- Analyze the integration within accounting and the postings to Profitability Analysis
- Analyze the elements important to profitability management



Outlining Profitability Management Options

LESSON OVERVIEW

This lesson explains the terminology, the cost accounting methods, and the different views that are used in profitability management.



Describe the terminology and the cost accounting methods in profitability management. Identify the methods and the views of profitability management. Examine the business purposes of Profitability Analysis (CO-PA) and classic Profit Center Accounting (EC-PCA) in the SAP system.

Business Example

Your company wants to implement a profitability accounting application in the SAP system. As a member of the project team, you must recommend whether to implement Profitability Analysis (CO-PA) or classic Profit Center Accounting (EC-PCA). You will then be responsible for implementing the applications selected. For this reason, you require the following knowledge:

- An understanding of the terminology in profitability management
- An understanding of the methods of profitability management
- An understanding of the different views of profitability management



First, convey to the participants that CO-PA is a market-oriented module and, for this reason, has the corresponding analytics functions. The objects in CO-PA, representing market segments, also support this market-oriented view.

The EC-PCA module is designed for internal or company-oriented CO-PA. The purpose of this module is to determine an internal operating profit for various corporate units. The reports in the EC-PCA module can additionally display selected balance sheet items. However, the reports in the CO-PA module display only costs and revenues.

Next, clarify the difference between the cost-of-sales accounting approach and period accounting approach.

The period accounting approach distinguishes between individual cost and revenue elements, such as material costs. The total costs for a period are compared with the total operating output for the period. The output of products manufactured within a period but not yet sold (stock increases) are added to the sales revenues. The costs of the products produced in past periods but sold in the current period (stock decreases) are deducted from the sales revenue. Together with additional capitalized internal activities and other revenues, the period accounting approach provides the total operating output for the period.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Describe the terminology, methods, and views of profitability management

Terminology in Profitability Management

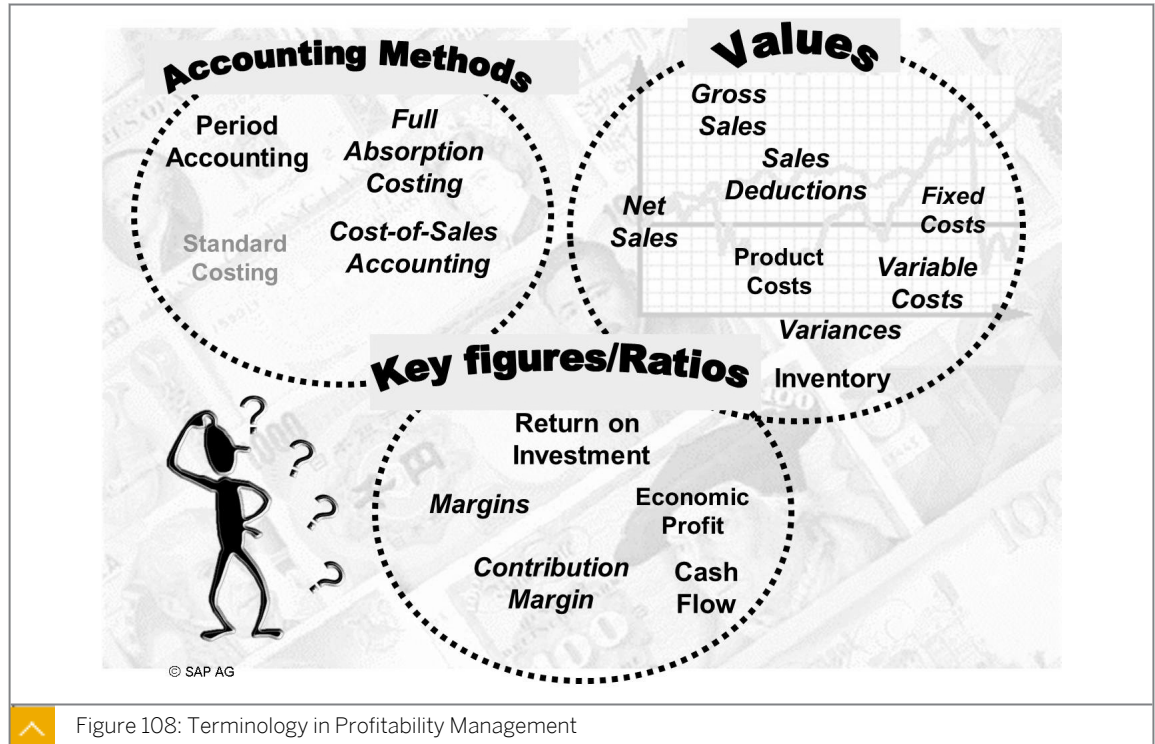


Figure 108: Terminology in Profitability Management

The figure represents the key figures used in profitability accounting. The items in italics are the values that can be analyzed in CO-PA and also in EC-PCA. All other key figures can be analyzed in EC-PCA.

Methods of Profitability Management

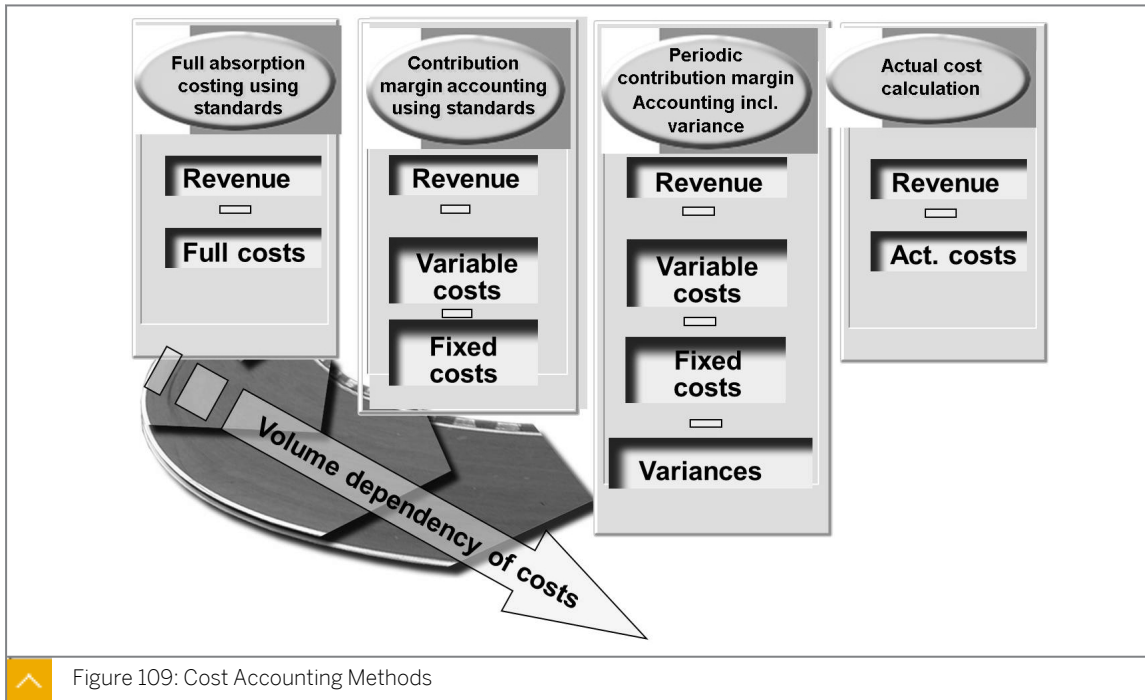


Figure 109: Cost Accounting Methods

You can execute profitability reporting at various levels of detail. In a distribution business environment, the detailed product cost information is not required, and a full absorption approach may therefore be sufficient to analyze profitability. However, in a standard manufacturing costing environment, the breakdown into fixed and variable standards may be important when analyzing profitability.

To reflect the periodic actual cost, the fixed and the variable standard cost plus variance may be added to analyze contribution margins. Some companies prefer to analyze their contribution margin based on the periodic actual cost, which can be recorded in the material ledger.

Accounting Methods



In the cost-of-sales accounting approach, there is no differentiation according to cost elements. Here, the sales revenues are compared with the manufacturing costs for the products sold, also known as cost of sale. The manufacturing costs may include material and personnel costs that were incurred in previous periods. The costs that cannot be directly assigned to the sale, such as sales and administration costs, are displayed separately. The cost-of-sales procedure, for this reason, also indicates where in the company costs were incurred.



Cost-of-sales accounting	Period accounting
Revenue Sales deductions Cost of sales	Revenue Sales deductions Stock changes Capitalized internal activities Changes to work in process
Gross results	Total output
Sales and marketing costs Administration costs Research and development	Material cost Personnel costs Depreciation Interest ...

Figure 110: Methods of Profitability Management

The accounting methods used for generating profitability statements are as follows:

- Cost-of-sales accounting

With this method, the emphasis is on matching the revenues for goods provided or for services provided, or for both, such as the value that a company gains as a result of sales against the related expenses for the items for which the value is lost when products are transferred out of the company. As a result, this accounting method displays the profit and loss information in a way that is optimized for conducting margin analyses. This method is optimal for the sales, marketing, and product management areas.

- Period accounting

With this method, the emphasis is on summarizing the activity and situational change over a period of time for a given organizational unit. As a result, the period accounting method presents the revenues and primary expenses incurred during a given period of time, and the changes in stock value levels, work-in-process, and capitalized activities. This method is optimal for the production and profit center areas.

In theory, applying either method to a given set of business transactions under a given set of laws provides the same bottom-line result (profit).

Companies must choose to use one of these methods for generating their legal financial statements. The choice is often determined by the country-specific legal requirements.

Views of Profitability Management

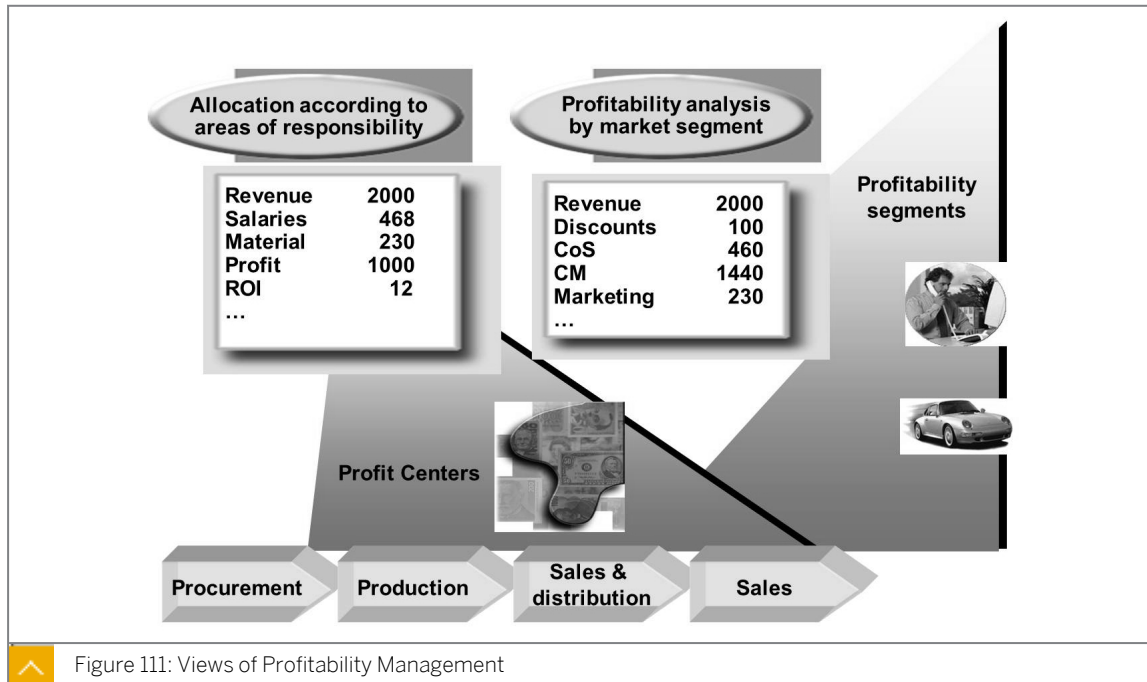


It is important to introduce both the costing-based CO-PA and account-based CO-PA.

The costing-based CO-PA uses the defined value fields that the groups for cost and revenue elements represent. The advantage here is that these value fields allow user-defined details in drilldown analytics. A further advantage is that the data can be valued using a product cost estimate. With the help of conditions, you can also calculate certain values, such as commissions for commercial representatives, to be included as estimated values in your analyses.

The account-based CO-PA helps to ensure that Management Accounting and Financial Accounting (FI) are reconciled on the account level at all times. In the account-based approach, all costs and revenues are transferred simultaneously to FI and CO-PA. The cost of

sales, which is posted to CO-PA when goods are issued, is of particular importance for CO-PA.



Sales Reporting

CO-PA allows you to analyze the profitability of specific market segments, such as products, customers and their summarizations, and organizational units (company codes or business areas). The aim is to provide your sales, marketing, product management, and business planning departments with the market-oriented controlling information to support the decision-making process.

Responsibility Reporting

You can use EC-PCA to analyze internal profit and loss for profit centers.

With EC-PCA, you can perform the following tasks:

- Evaluate the different areas or units within your company.
- Structure the profit centers of your company according to regions (branch offices and plants), functions (production and sales), or products (product ranges and divisions).

EC-PCA is a component of Enterprise Controlling.



FACILITATED DISCUSSION

Discuss the different methods of profitability management.



LESSON SUMMARY

You should now be able to:

- Describe the terminology, methods, and views of profitability management



Comparing Profitability Analysis and Profit Center Accounting

LESSON OVERVIEW

This lesson explains integration within accounting. It also describes the flow of actual values in Profitability Analysis (CO-PA) and classic Profit Center Accounting (EC-PCA).

Business Example

Your company has legal entities in Germany, Italy, and the United States. Sales and profitability must be reported in a corporate currency, and in the local currencies of each legal entity. Different types of reports are required by the following company employees:

- The company sales managers, Sam Sales and Randy Revenue, require a report summarizing sales performance figures such as revenue, discounts, and surcharges; as well as the sales and marketing expenses that encompass sales structure, product lines, and customers of the company.
- The company president wants all the month-end costs, such as freight and General and Administrative (G and A) expenses, accrued during the month in Controlling (CO), but not in Financial Accounting (FI). The intent is to estimate bottom-line profitability of the company at any time. At month end, the company president wants the actual costs in CO allocated realistically across the sales channels and responsibility areas.
- The company accountant, Carrie Cash, requires profitability reports at the month end along the areas of responsibility of the company, such as plants or departments. In addition, the accountant wants to track the capital investments, such as assets, and report on certain financial key performance indicators.

As a result, the company requires the following reports:

- Cross-company and company-specific reports in multiple currencies
- Multi-dimensional profit and loss reports across elements of the sales force, product lines, customers, and other organizational units
- Sales information, cost-of-sales information, contribution margins, production variances, and period cost information reports
- Allocation of the actual period costs (Selling, General, and Administrative (S, G, and A)) across organizational entities in the month-end reports for capital investments and profit and loss

For this reason, you require the following knowledge:

- An understanding of the purpose of CO-PA and EC-PCA
- How to execute reports of CO-PA and EC-PCA



Outline the purpose of CO-PA and EC-PCA to the participants. Examine the integration between accounting and the flow of the actual values in CO-PA.



LESSON OBJECTIVES

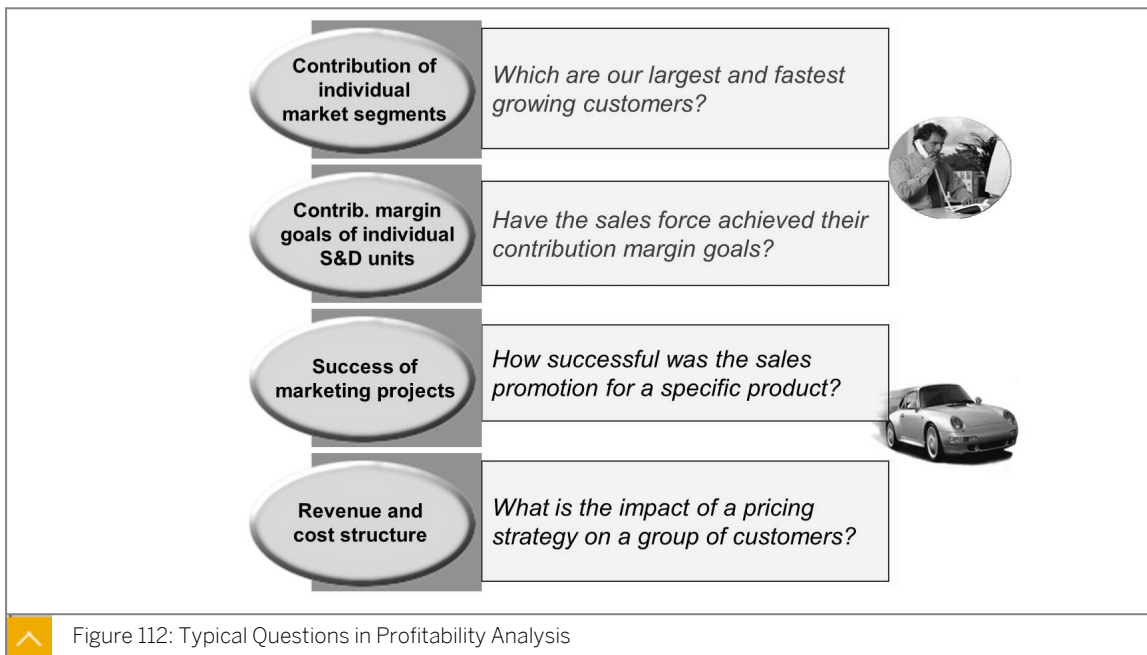
After completing this lesson, you will be able to:

- Define the flow of the actual values in Profitability Analysis and Profit Center Accounting
- Analyze the integration within accounting and the postings to Profitability Analysis

Profitability Analysis



This topic is designed to make participants understand where SAP positions CO-PA and to help participants understand the differences between CO-PA and PCA. Explain that participants must make a decision for their company based on the listed criteria. It is very important that participants are made aware that there are not always clear-cut criteria for using CO-PA.



The best way to show the purpose of profitability management in the SAP system is to think about some of the typical questions that can be answered using CO-PA.

Profitability Analysis by Market Segments

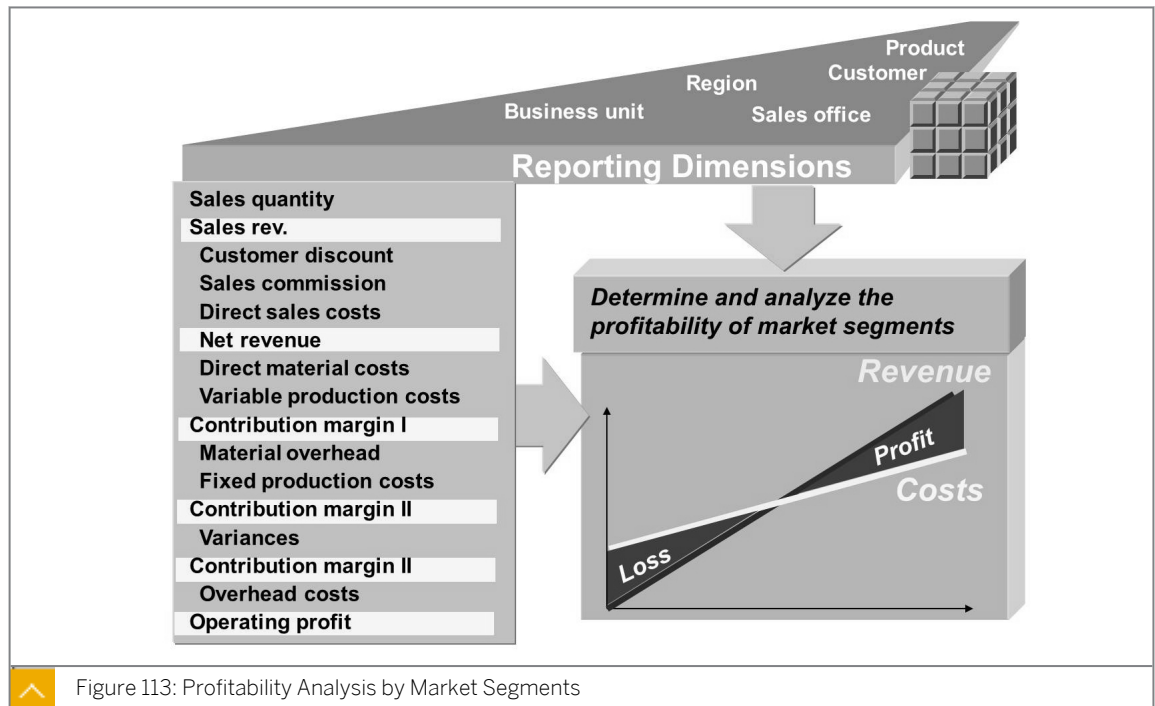


Figure 113: Profitability Analysis by Market Segments

The business purpose of CO-PA is to provide the company with profitability-oriented information on the performance of its market segments or sales channels. This information is used to support corporate planning and decision-making, especially in the areas of sales and marketing.

CO-PA allows you to define market segments and performance figures, with maximum flexibility in market evaluation. The definition of a market is configured in the system by selecting the characteristics that are the subjects of analyses. Performance figures may be either profit and loss account balances or freely-defined value fields.

Market segments are combinations of information regarding the selling organization and its customers and products. Performance figures are measurements of the selling organization's quantities, revenues, discounts, surcharges, product costs, margins, and period costs.

The results of CO-PA can be analyzed with a multidimensional reporting tool allowing the dynamic sorting and rearranging of data in order to provide multiple perspectives within a single report.

Profit Center Accounting

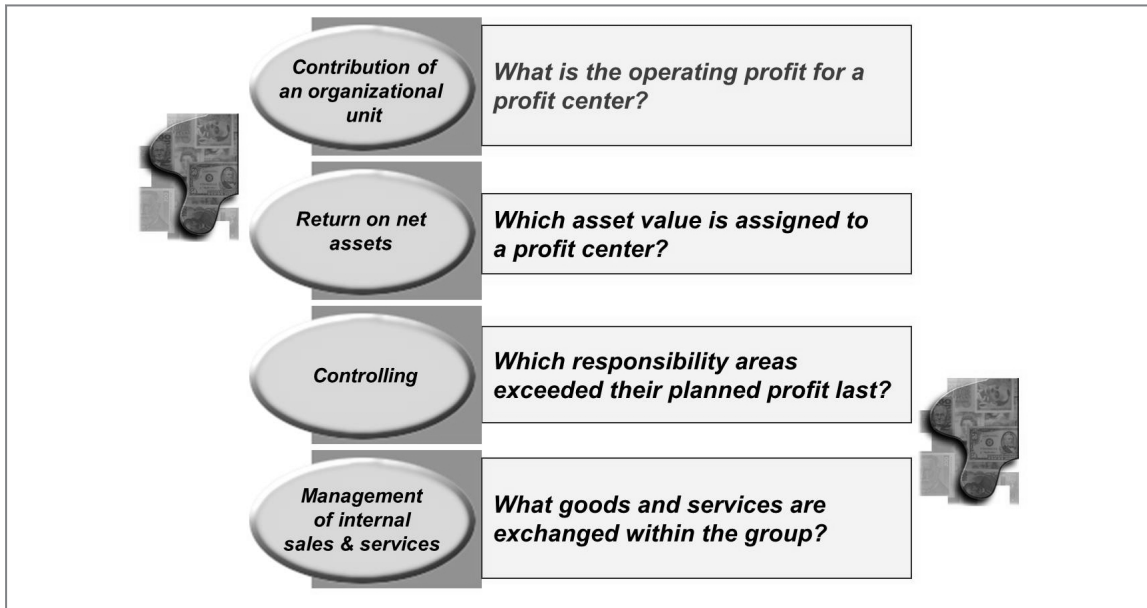


Figure 114: Typical Questions in Profit Center Accounting

The best way to show the purpose of profitability management in the SAP system is to think about some of the typical questions that can be answered using EC-PCA.

Responsibility Reporting

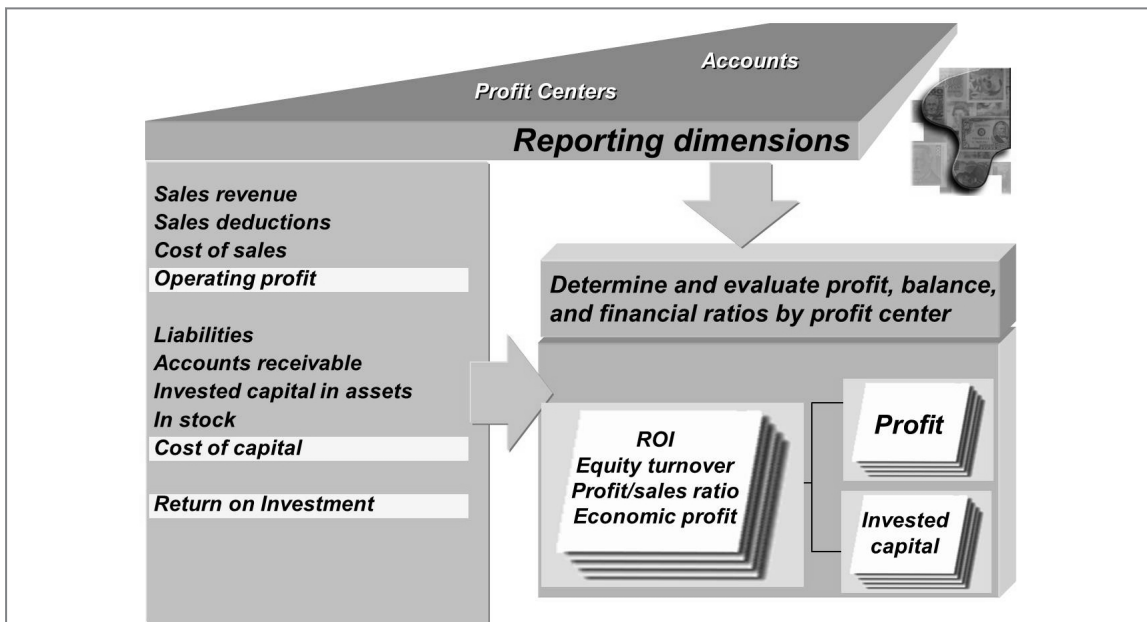


Figure 115: Responsibility Reporting

EC-PCA allows you to calculate the internal operating results for profit centers of the company. A profit center represents an organizational sub-unit that operates independently in the market and is responsible for its own costs and revenues.

Structure your company into profit centers by assigning the master data of each profit-relevant object (such as materials, cost center, order, project, sales order, asset, cost object, and profitability segment) to a profit center.

All cost-relevant and profit-relevant business transactions in the SAP system are updated in the hierarchy structure of the company. These transactions are simultaneously processed in the original component and organized according to cost and revenue elements. This method of maintaining cost and revenue information transforms all the flow of goods and services within the company into exchanges of goods and services between profit centers. This profit center structure applies to the actual postings and the profit center plan data.

You can also regard a profit center as an investment center. In addition to the flow of goods and services, you can transfer the selected balance sheet line items (such as fixed assets, payables and receivables, material stocks, and work-in-process) to profit centers on a periodic basis. This transfer allows you to calculate key figures, such as profit on sales, return on investment, and cash flow.

Profitability Analysis and Profit Center Accounting Reporting



Profitability analysis		Profit-center accounting	
<i>Value fields</i>		<i>Cost and revenue elements</i>	
Revenue	1,000,000	800000 Revenues	1,000,000
Sales deductions	100,000	808000 Sales deductions	100,000
Net revenues	900,000	Net revenues	900,000
Var. material costs	400,000	893000 Cost of sales	690,000
Var. production costs	190,000	231000 Price differences	10,000
Quantity variances	3,000	651000 Research & Develop.	10,000
Price variances	7,000	671000 Marketing	50,000
Contribution margin 1	300,000	655000 Sales and Administration	40,000
Material overhead costs	50,000	Profit	100,000
Total production overheads	50,000	157000 Liabilities	800,000
Contribution margin 2	200,000	140000 Receivables	1,200,000
Research & develop.	10,000	300000 Inventory	450,000
Marketing	50,000	...	
Sales and administration	40,000	Cost of capital (11%)	82,000
Contribution margin 3	100,000	Economic Profit	18,000

Figure 116: Reporting

The method of determining period operating results in CO-PA is based on the assumption that the success of a company can be measured primarily based on its transactions with other companies. The aim of CO-PA is to supply decision-support information to sales, marketing, product management, controlling, and corporate planning teams of the company.

The sales-oriented approach in CO-PA means that until a sales transaction has been completed, no contribution to the success of the company is realized. As a result, the products sold are transferred to CO-PA in accordance with the cost-of-sales accounting method and the information about the sales revenue and sales deductions is provided. This net revenue is then compared with the cost of sales of the products sold. The costs consist of the cost of goods manufactured or the services rendered in addition to any known production variances.

To complete your profitability data, assign the overhead costs to profitability segments in the course of your period-end closing activities.



How to Execute Reports of CO-PA and EC-PCA

1. Show a typical CO-PA report, such as the report AC040. Do not spend too much time on navigation and information, but instead position this demonstration as a preview of what participants are aiming for.

Emphasize the multiple dimensions, full contribution margin results, and detail versus drilldown list.

Briefly demonstrate how to move through the report. The most important thing at this stage is for the participants to realize what the characteristics and value fields are and the information that can be evaluated in CO-PA.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Environment* → *Set Operating Concern*.
 - b) In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field, select the *costing-based* radio button, and choose *Continue*.
 - c) Choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Execute Report: AC040*.
 - d) On the *Selection: AC040* screen, enter **2000** in the *Year* field and **100** in the *Version* field.
 - e) Choose the *Execute* pushbutton.
 - f) Show the profitability report.
 - g) Return to the *SAP Easy Access* screen.
2. Show a typical cost-of-sales EC-PCA report.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profit Center Accounting* → *Information System* → *Reports for Profit Center Accounting* → *Interactive Reporting* → *Profit Center Group: Plan/Actual/Variance*.
 - b) If prompted, enter **1000** in the *Controlling area* field.
 - c) On the *Selection: Profit Center: Plan/Actual Comparison* screen, enter the following data:

Field Name or Data Type	Value
<i>From Period</i>	1
<i>To Period</i>	12
<i>Fiscal Year</i>	Current fiscal year
<i>Plan Version</i>	0
<i>Profit center group</i>	H1000
<i>Or values</i>	Blank
<i>Profit+loss accts. grp</i>	OAS
<i>Or values</i>	Blank

- d) Choose the *Execute* pushbutton.
 - e) Show the profit center report.
 - f) Return to the *SAP Easy Access* screen.
-

Unit 7

Exercise 12



Execute Reports of CO-PA

Business Example

Your company has legal entities in Germany, Italy, and the United States and is able to report sales and profitability across the company in a group currency and in each of the legal entity's local currencies.

The sales managers require a report summarizing the sales performance figures, such as revenue, discounts, and surcharges, that encompass the company's sales structure, product lines, and customers. The sales managers also need to view sales and marketing costs along these lines. Describe the options available for the organizational structures for CO-PA.

Execute reports in CO-PA.

Call the profitability report AC605-ORDER (order analysis) in the costing-based CO-PA. Select the reporting date for the current year.

1. Obtain an overview of the order situation with regard to sales characteristics.

Field Name or Data Type	Value
<i>Sales Org.</i>	1000
<i>From Fiscal Year</i>	Current year
<i>Output Type</i>	<i>Graphical report output</i>

2. Obtain an overview of the plan versus actual data with regard to sales characteristics.



Execute Reports of CO-PA

Business Example

Your company has legal entities in Germany, Italy, and the United States and is able to report sales and profitability across the company in a group currency and in each of the legal entity's local currencies.

The sales managers require a report summarizing the sales performance figures, such as revenue, discounts, and surcharges, that encompass the company's sales structure, product lines, and customers. The sales managers also need to view sales and marketing costs along these lines. Describe the options available for the organizational structures for CO-PA.

Execute reports in CO-PA.

Call the profitability report AC605-ORDER (order analysis) in the costing-based CO-PA. Select the reporting date for the current year.

1. Obtain an overview of the order situation with regard to sales characteristics.

Field Name or Data Type	Value
<i>Sales Org.</i>	1000
<i>From Fiscal Year</i>	Current year
<i>Output Type</i>	<i>Graphical report output</i>

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Execute Report*.
- b) In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field and select the *costing-based* radio button.
- c) Choose the *Continue* pushbutton.




Note:

If required, set the costing-based CO-PA by choosing *Accounting* → *Controlling* → *Profitability Analysis* → *Environment* → *Set Operating Concern*.

- d) On *Run Profitability Report: Initial Screen*, select *AC605-ORDER* report and choose *Report* → *Execute*.
- e) On the *Selection: AC605-ORDER* screen, enter the following data:


Field Name or Data Type	Value
<i>Sales Org.</i>	1000
<i>From Fiscal Year</i>	Current year
<i>Output Type</i>	<i>Graphical report output</i>


- f) Choose  (*Execute*) pushbutton. The report contains the data on *Incoming sales orders* and *Open Orders*.
- g) Choose *Division* from the *Navigation* column and drag and drop it right below *Sales employee*.
The report is now shown by *Division*.





Note:

You can also drill down by *Industry*, *Material Group*, *Customer Group*, or *Customer*.

- h) Choose  (*Exit*) to exit the report and return to *Run Profitability Report: Initial Screen*.
2. Obtain an overview of the plan versus actual data with regard to sales characteristics.

- a) On *Run Profitability Report: Initial Screen*, select *AC605-ECPCA* report and choose  (*Execute*).
- b) On the *Selection: AC605-ECPCA* screen, enter the following data:

Field Name or Data Type	Value
<i>From Fiscal Year</i>	Previous fiscal year
<i>From Period</i>	1
<i>To Period</i>	12
<i>Version</i>	0
<i>Output Type</i>	<i>Graphical report output</i>

- c) Choose  (*Execute*) or press F8. The report contains plan versus actual data as well as a variance calculation.
- d) Choose *Product* from the *Navigation* column and drag and drop it right below *Plant*.
The report is now shown by *Product*.
- e) Choose  (*Exit*) to exit the report and return to the *SAP Easy Access* screen.

Integration Within Accounting

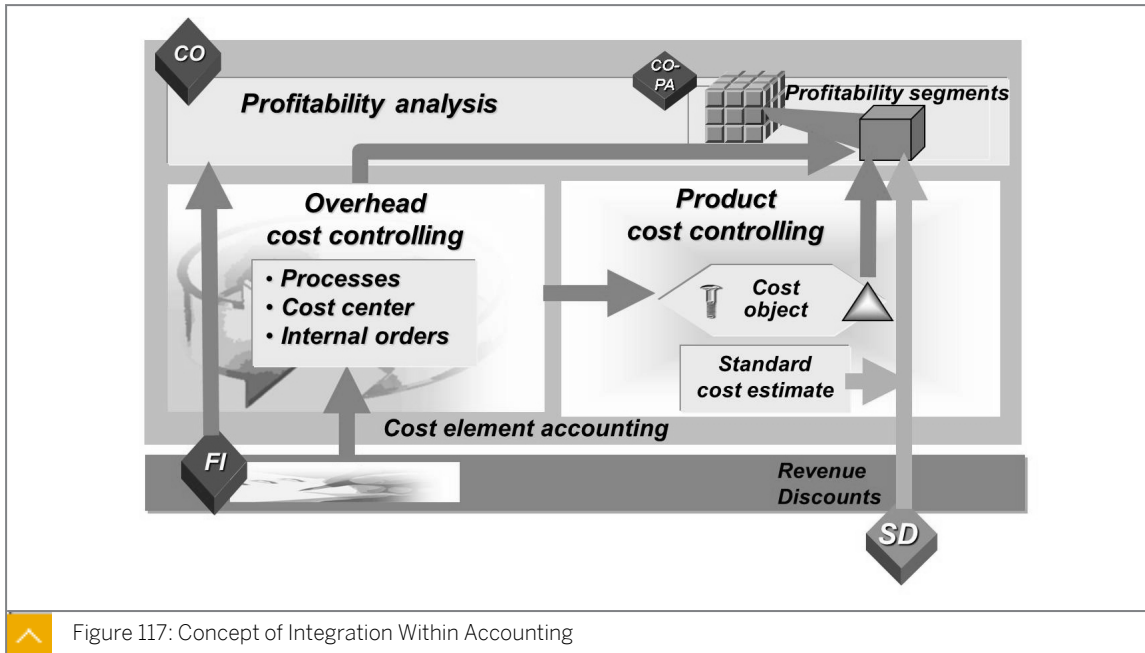


Figure 117: Concept of Integration Within Accounting

Management Accounting contains all the required accounting functions needed for effective controlling. If a company divides accounting into internal and external viewpoints, Management Accounting represents internal accounting because it provides information to managers who are charged with directing and controlling its operations.

Management Accounting includes cost and revenue accounting and, together with the EC-PCA component, offers all the controlling opportunities without being limited to the legal structures used in FI.

Management Accounting is made up of multiple application components optimized for processing different approaches to managerial accounting.

Management Accounting answers the following typical questions with the appropriate component:

- What costs occur within our company? (CO-OM)
- What does producing a product or providing a service cost our company? (CO-PC)
- In which market segments are we successful? (CO-PA)
- How profitable are our individual organizational areas (profit centers)? (EC-PCA)



Value flows and reconciliation with FI is an important point to be considered. Individually-defined value fields, material valuation with the help of a product cost estimate for materials, the use of estimated costs or sales deductions, and reconciliation of costing-based CO-PA with FI are factors that are difficult, though not impossible.

Emphasize to the participants that the purpose of costing-based CO-PA is not to ensure that CO-PA is reconciled with FI. If required, account-based CO-PA can be run in parallel with costing-based CO-PA. Because account-based CO-PA displays cost and revenue elements and the values are posted at exactly the same time as in FI, comparison and reconciliation is

much easier. In addition, the reconciliation ledger can be used to reconcile FI and cost accounting.

Flow of Actual Values to Profitability Analysis

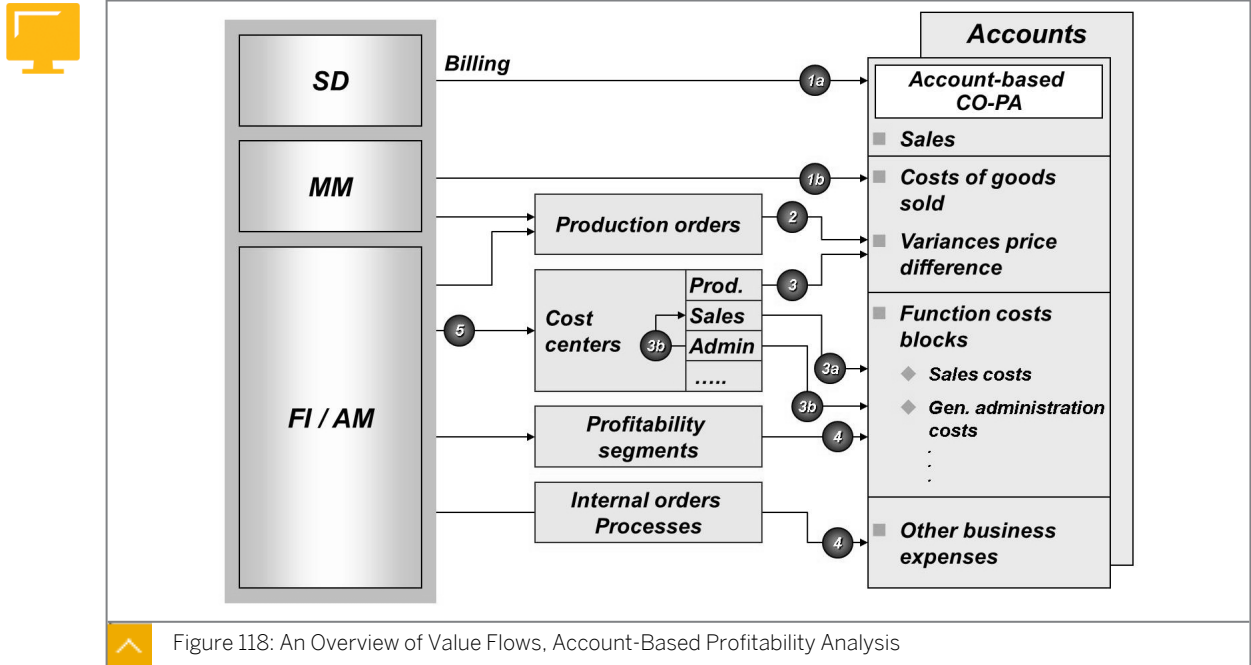


Figure 118: An Overview of Value Flows, Account-Based Profitability Analysis

The figure displays the value flows and their corresponding postings in account-based CO-PA.

Value Flows and Postings in Account-Based CO-PA

The following table shows the value flow from various processes to CO-PA:

Figure Reference	Process	Posting CO-PA
1a)	Billing	Revenues
1b)	Goods issue	Cost of sales
2)	Production variances from production orders	Accumulated as a price difference
3)	Variances from cost centers	Assessments, activity allocation
3a)	Surplus or shortage on cost centers according to functional areas	Cost center overheads
4)	Sales costs through segment levels	Direct account assignment in CO-PA
5)	Account assignment to CO objects	Allocation to CO-PA

The actual postings are the most important data source in account-based CO-PA. Both sales orders and billing documents can be transferred from Sales and Distribution (SD). In addition,

an interface program is available to transfer external data to the SAP system. You can also transfer the costs from cost centers, orders, and projects as well as the costs and revenues from direct postings, General Ledger (G/L) account postings in FI, and the orders received in operations. You can settle the costs from CO to profitability segments.

An Overview of Value Flows, Costing-Based Profitability Analysis

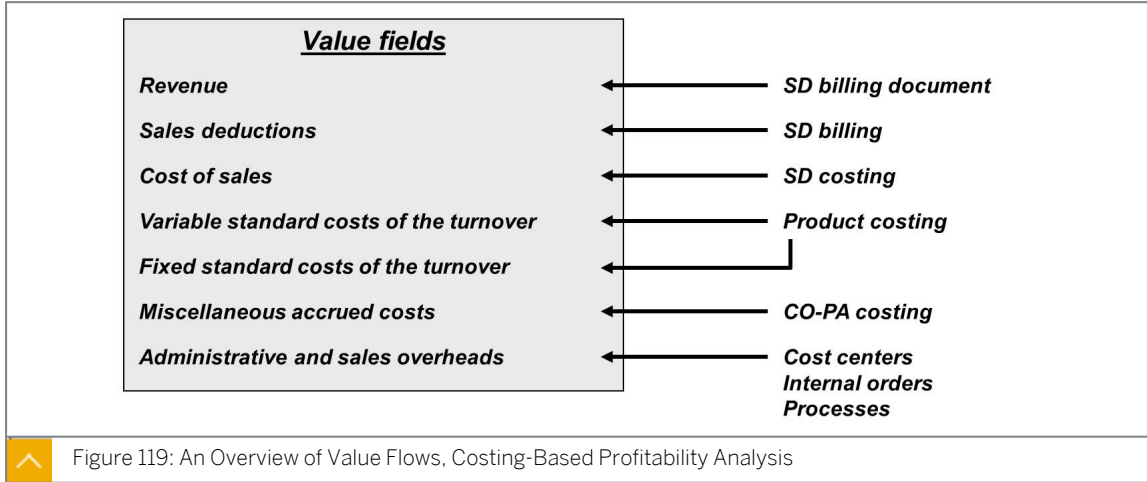


Figure 119: An Overview of Value Flows, Costing-Based Profitability Analysis

EC-PCA is a statistical accounting component that presents the transaction data posted in other components from a profit-center-oriented point of view. The postings in EC-PCA are statistical postings because the profit center is not an account assignment object in Management Accounting.

Integration of the SAP system makes it possible to automatically post profit-relevant data to EC-PCA when a transaction is posted. The system either transfers the relevant items from the original postings or creates additional postings.

In costing-based CO-PA, you can perform the following tasks:

- Valuate the incoming sales orders or billing documents to automatically determine the anticipated sales deductions or costs.
- Revaluate your data periodically to adjust the initial, real-time valuation or add the actual costs of goods manufactured.

When the system transfers the standard costs of sales, the fixed and the variable cost elements are transferred to different value fields. This transfer enables the necessary contribution margin accounting for Profitability and Sales Accounting. To settle between the costing-based CO-PA and FI profit and loss, all other periodical costs can be transferred to the costing-based CO-PA.



FACILITATED DISCUSSION

Discuss some typical questions that show the purpose of CO-PA and EC-PCA.



LESSON SUMMARY

You should now be able to:

- Define the flow of the actual values in Profitability Analysis and Profit Center Accounting
- Analyze the integration within accounting and the postings to Profitability Analysis



Analyzing Profitability Management Objects

LESSON OVERVIEW

This lesson describes the various objects and aspects important to profitability management.

Business Example

Your company has legal entities in Germany, Italy, and the United States, so it must report sales and profitability both across the company in a corporate currency and within each of the legal entities in their local currencies. Different types of reports are required by the following company employees:

- The company sales managers, Sam Sales and Randy Revenue, require a report that summarizes sales performance figures, such as the revenue, discounts, and surcharges that encompass the sales structure, product lines, and customers of the company. They also require sales and marketing expenses along these lines.
- The company president, Bob Big, wants all the month-end costs, such as freight and General and Administrative (G and A) expenses, accrued in Controlling (CO) but not in Financial Accounting (FI). The intent is to be able to estimate bottom-line profitability at any time. At month end, the company president wants the actual costs in CO allocated realistically across the sales channels and responsibility areas.
- The company accountant, Carrie Cash, requires profitability reports at the month end along the areas of responsibility of the company, such as plants or departments. In addition, the accountant wants to track capital investments, such as assets, and report on certain key financial performance indicators.

As a result, the company requires the following reports:

- Cross-company and company-specific reporting in multiple currencies
- Multidimensional profit and loss reporting across elements of the sales force, product lines, customers, and other organizational units
- Sales information, cost-of-sales information, contribution margins, production variances, and period cost information reports
- Allocation of the actual period costs (Selling, General, and Administrative (S, G, and A)) across organizational entities in the month-end reports for capital investments and profit and loss

For this reason, you require the following knowledge:

- An understanding of the master data within profitability management
- An understanding of the parallel currencies of postings and different views in profitability management
- An understanding of the different types of profitability management



Inform the participants about the objects in profitability management. Ensure that they are aware of the parallel currencies. Explain extensively the various views in profitability management.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Analyze the elements important to profitability management

Master Data Within Profitability Management

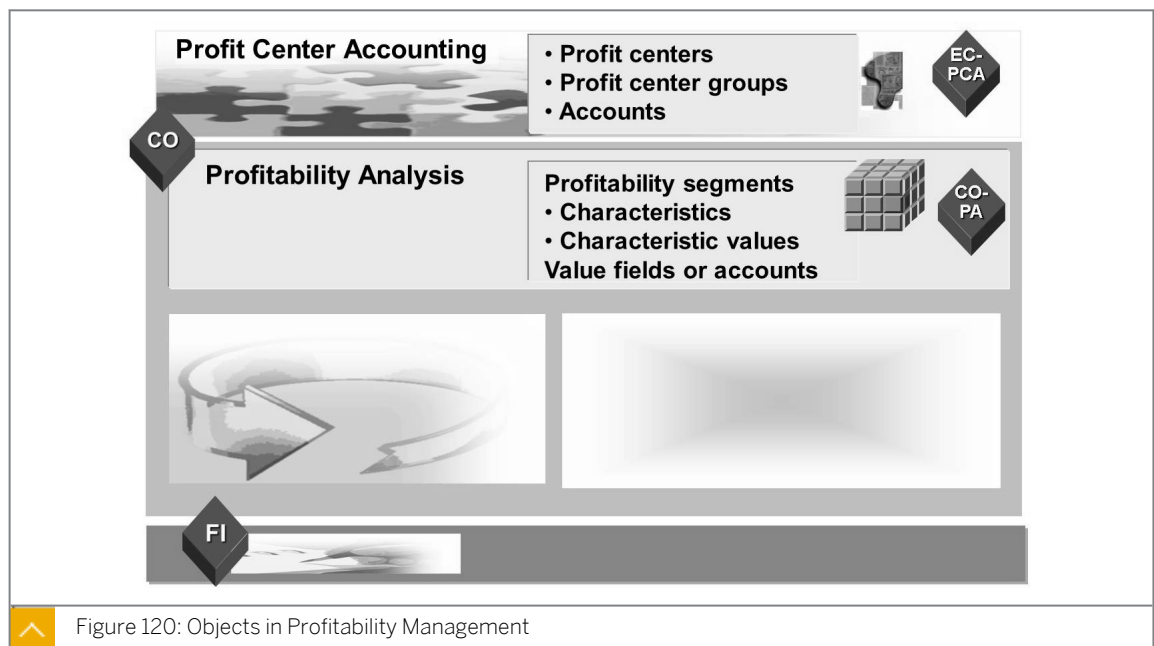


Figure 120: Objects in Profitability Management

Profitability segments are the market segments or strategic business units that you can analyze in Profitability Analysis (CO-PA). These segments represent combinations of product, customer, and sales structure information and can contain information on company codes, business units, and profit centers.

The primary purpose of CO-PA is to enable reporting on margins and other profitability figures along marketing lines as defined by profitability segments. The design of CO-PA is optimized for producing profit and loss statements under the cost-of-sales accounting format and philosophy.

Profit centers are the areas of responsibility within a company. Profit centers are responsible for revenues and expenses, as well as certain assets and liabilities in some cases. All profit centers are arranged into a standard hierarchy representing the entire company.

The primary purpose of classic Profit Center Accounting (EC-PCA) is to enable reporting on performance information along responsibility-oriented organizational lines as defined by the profit center hierarchy. The design of EC-PCA is optimized for producing profit and loss statements under the period accounting format and philosophy. Notice that the cost-of-sales accounting in EC-PCA can also be undertaken with the help of functional areas.

Organizational Units



Familiarize participants with organizational units. Briefly explain where to define individual company units, such as the Management Accounting area. The most important term to explain in the Management Accounting area is the operating concern. In addition, emphasize how the sales organization and plant are integrated in the corporate structure.

Furthermore, currencies are a central issue. There are 3 currencies that can be stored in EC-PCA. The same currencies are automatically stored in account-based CO-PA. In Release 4.0, the operating concern currency and the company code currency can be stored in parallel in costing-based CO-PA. Emphasize that this storage leads to an increase in the data volume in CO-PA.

Finally, give a summary of the differences between CO-PA and EC-PCA. Explain that parallel valuation represents the concept of looking at profitability from an internal and external standpoint. The implication here is that as of Release 4.5, transfer prices and parallel valuation views can be reflected in CO-PA.

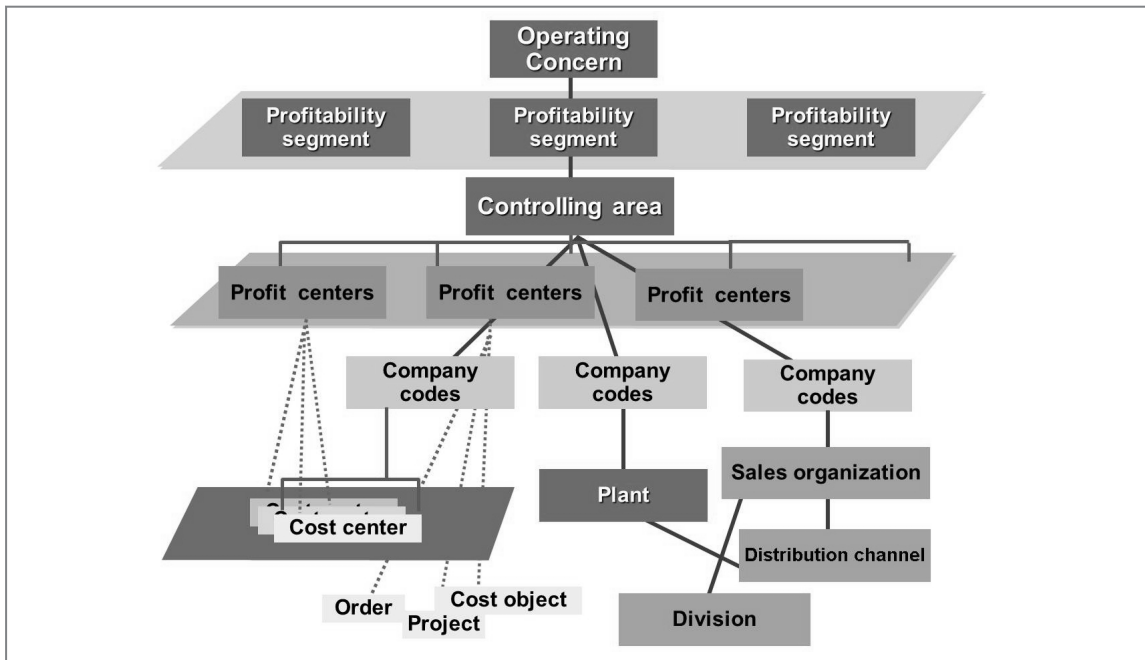


Figure 121: Organizational Units and Master Data

The operating concern is the key organizational unit in CO-PA. It defines the extent of the combination of marketing and sales information reported in CO-PA. When organizational structures are defined, one or more controlling areas are assigned to an operating concern. For the sake of simplicity and convenience, companies have a single operating concern if all controlling areas and company codes share the same fiscal calendar.

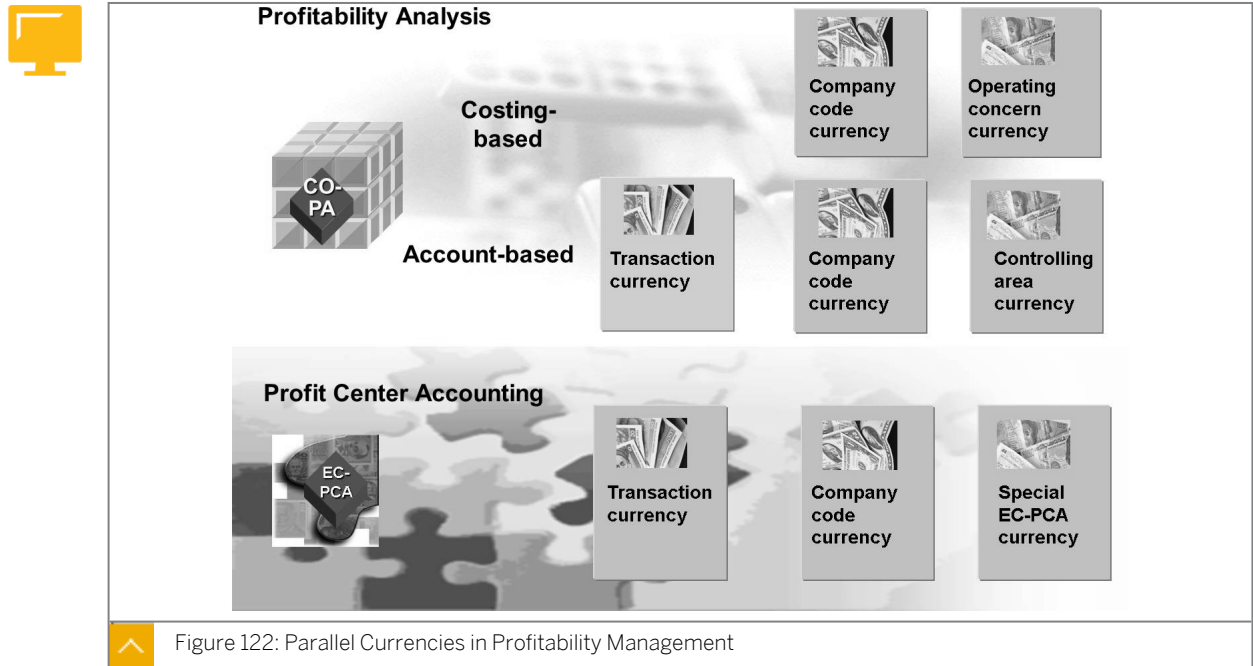
The controlling area is an organizational unit that delimits the independent cost accounting operations of the company, such as Cost Center Accounting, Profit Center Accounting, and Order Accounting. Company codes are assigned to controlling areas when organizational structures are defined.

Note that you can assign several company codes to a controlling area to enable cross-company cost allocations.

The company code is an independent accounting unit within a client. At the company code level, the legal requirements of a balance sheet or a profit and loss statement are fulfilled. Plants are assigned to company codes when you define organizational structures.

The plant represents a production center. It is the primary organizational unit in operations and manufacturing.

Parallel Currencies of Postings in Profitability Management



In costing-based CO-PA, all amounts are stored in an operating concern currency, which is specified in the operating concern attributes.

Configure the attributes to store values in the local currency as well. This option has the effect of doubling the stored transaction data.

Account-based CO-PA stores all transactions in the following currencies: Transaction currency, local currency, and controlling area currency.

EC-PCA can store transactions in the transaction currency, local currency, and a special EC-PCA currency.



How to Define Parallel Currencies of Postings in Profitability Management

1. Check the account documents and check whether **2000** is allocated to the *Company Code* field.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Document Entry* → *Enter G/L Account Document*.
 - b) On the *Enter G/L Account Document: Company Code 2000* screen, choose the *Company Code* pushbutton.
 - c) In the *Enter Company Code* dialog box, enter **2000** in the *Company Code* field.
 - d) Choose the *Tree On* pushbutton.

- e) Choose **Z_WITH_PROFITABILITY_SEGMENT** in the *Screen Variants for Items* field. Choose the *Tree Off* pushbutton.
- f) On the *Enter G/L Account Document: Company Code 2000* screen, enter the following data:

Field Name or Data Type	Value
<i>Document Date</i>	Current date
<i>Currency</i>	USD
<i>G/L acct.</i>	460000
<i>D/C</i>	Debit
<i>Amount in doc. curr.</i>	10

- g) Choose the arrow for *Profitability Segment*. Enter **T-CO05A00** in the *Customer* field and choose the *Continue* pushbutton.

- h) In the *Items* table, enter the following data:

Field Name or Data Type	Value
<i>G/L acct.</i>	113100
<i>D/C</i>	Credit
<i>Amount in doc. curr.</i>	10

- i) Save the entries and exit the report.

2. Display the document in CO-PA – both cost-based and account-based.

- a) On the *SAP Easy Access* screen, run transaction code **/NKEBC**.
- b) In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field and select the *costing-based* radio button. Choose the *Continue* pushbutton.
- c) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Items List* → *Actual*.
- d) On *Display Actual Line Items: Initial Screen*, enter the following data:

Field Name or Data Type	Value
<i>Period/year</i>	Current date
<i>Cost Element</i>	460000
<i>Customer</i>	T-CO05A00

- e) Choose the *Execute* pushbutton.
- f) On the *Display Actual Line Items: List* screen, check the list entries. Check that the documents are stored only in the operating concern currency and company code currency; not in transaction currency USD.
- g) Now, run transaction code **/NKEBC**.

- h) In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field and select the *account-based* radio button. Choose the *Continue* pushbutton.
- i) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Items List* → *Actual*.
- j) On *Display Actual Line Items: Initial Screen*, enter the following data:

Field Name or Data Type	Value
<i>Period/year</i>	Current date
<i>Cost Element</i>	460000

- k) Choose the *Execute* pushbutton.
- l) On the *Display Actual Line Items: List* screen, check the list entries. Check that the documents are stored in transaction currency USD, company code currency, and controlling area currency.
- m) Return to the *SAP Easy Access* screen.

Customizing Monitor



Figure 123: Customizing Monitor – Organizational Structures

Gain an overview of the organizational assignment for your operating concern by using the Customizing Monitor.

The Customizing Monitor shows an overview of the organizational structure and its assignments, which are as follows:

- The controlling areas and the company codes that are assigned to plants and sales organizations
- The basic settings for the operating concern

By using the Customizing Monitor, you can analyze the organizational assignments of the operating concern.



Note:

If parallel evaluation in profit center valuation is active, set the material ledger as active in order to post transactions in parallel in profit center valuation.



How to Use the Customizing Monitor

1. Check the basic settings and organizational assignments for the IDEA operating concern using the Customizing Monitor.
 - Is the controlling area 1000 assigned to the IDEA operating concern?
 - Does the IDEA operating concern have the same fiscal year variants as the controlling area 1000?
 - Does the assigned company code 1000 also have the same fiscal year variant?
 - What chart of accounts do the controlling area and the company code have?
 - a) On the *SAP Easy Access* screen, enter the transaction code **ORKE**.
 - b) In Customizing, choose *Controlling* → *Profitability Analysis* → *Tools* → *Analysis* → *Check Customizing Settings*.



Hint:

If prompted, enter **IDEA** in the *Operating Concern* field, select the *costing-based* radio button, and then choose the *Continue* pushbutton.

- c) On *Customizing Monitor - Organizational Structures: Initial Screen*, open the *Operating Concern IDEA* folder and then choose the *CO Area 1000* node.
- d) Choose *Company Code 1000* and then choose *Sales Org. and Plant*.
Note the sales organizations and plants assigned to this company code.
- e) Choose *CO Area: 1000* and *Company Code: 1000* and note the *Fiscal Year Variant*. All have the same *Fiscal Year Variant* value, *K4*.
- f) Choose *CO Area: 1000* and *Company Code: 1000* and note that both use the same *Chart of accounts* value, *INT*.
- g) Notice that all assigned organizational units are listed in the *Overview: Organization structures* of the operating concern. The detailed information from the respective master data is also displayed.

Different Views of a Company

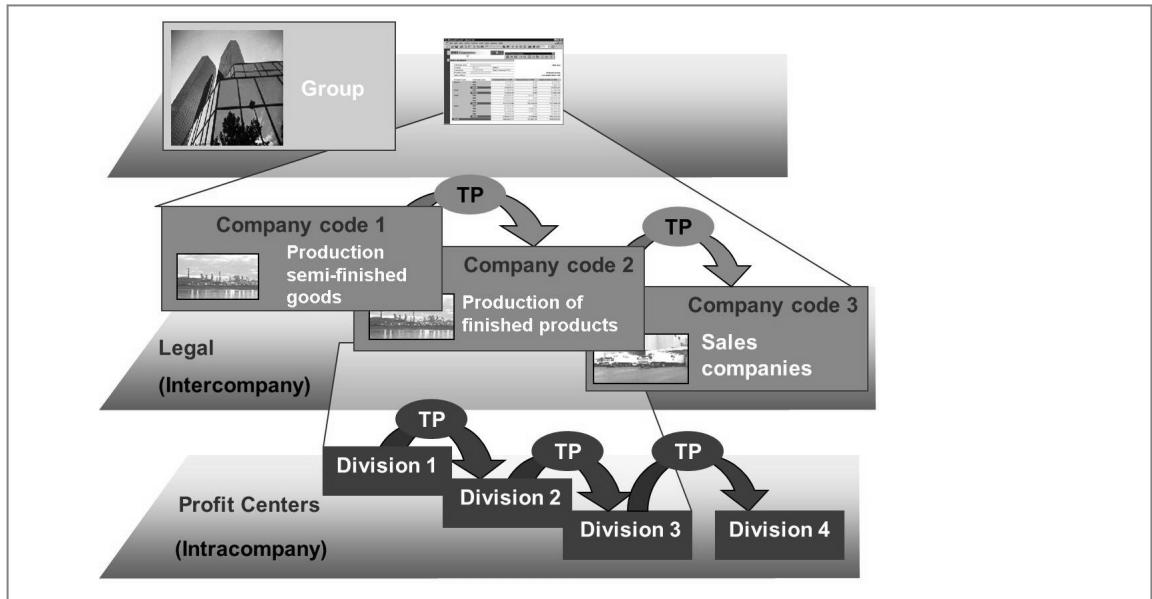


Figure 124: Different Views of a Company

Decision-makers in a company need different types of information.

For the individual company codes, profitability data must be shown from the perspective of each company code and must match the income statement.

For the group head office, the group as a whole is the most important view. As a way to eliminate intercompany profits, the basis for decision-making requires the group to be represented as a business unit.

For profit centers, profit center managers require equivalent information. In such cases, sales between profit centers within a company are also part of the profit analysis.

Different Views in CO-PA

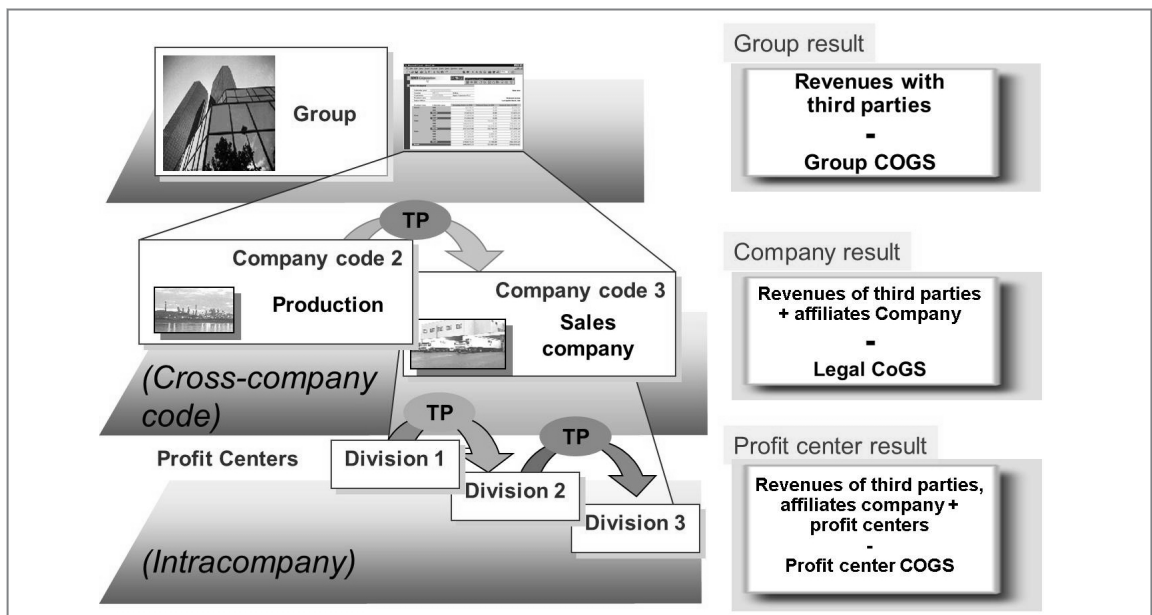


Figure 125: Different Views in CO-PA

CO-PA must provide the appropriate information to your company to form the right basis for decision-making.

The individuals responsible for a group must obtain the group result through the company results of the legally independent units. These company results should also allow profit center managers to arrive at a profit center result. This means that they should be able to carry out CO-PA using transfer prices.

Parallel Evaluation in CO-PA

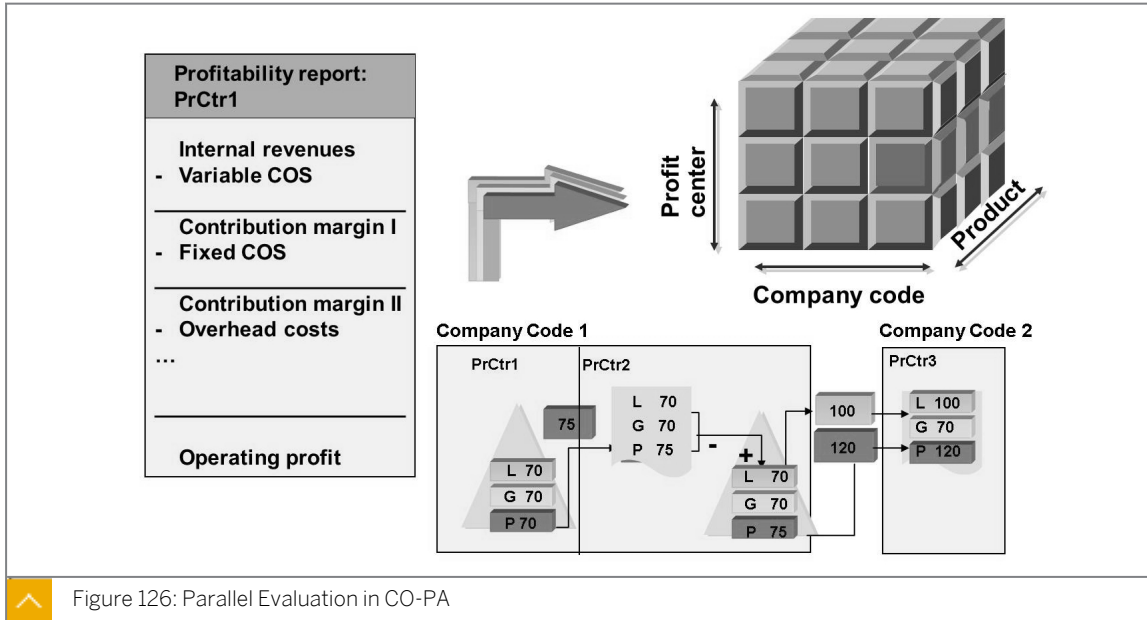


Figure 126: Parallel Evaluation in CO-PA

As of Release 4.5, sales revenues can be transferred between profit centers in CO-PA as internal revenues.

When you customize CO-PA, decide whether you want to store the profit center valuation in CO-PA.

As of SAP R/3 Enterprise Release 4.7, you can also transfer the result of the Actual Costing - material ledger to CO-PA. To do so, map the cost component structure of the material ledger elements to the value fields you have planned in your operating concern.

Different Types of Profitability Management



Comparison	CO-PA Costing Based	CO-PA Account Based	EC-PCA Profit Center
Aims of profitability accounting	<i>Market profitability</i>	<i>Market profitability</i>	<i>Enterprise controlling</i>
Procedure 	<i>Cost of sales accounting</i>	<i>Cost of Sales accounting</i>	<i>Period accounting and cost of sales using functional areas</i>
Objects to be analyzed 	<i>Profitability segments</i>	<i>Profitability segments</i>	<i>Profit center or Profit center groups</i>
Performance figures 	<i>Profit-related key figures</i>	<i>Profit-related key figures</i>	<i>Profit-related and financial key figures</i>

Figure 127: Summary: Profitability Management (1)

This figure shows the different aspects of profitability management from the management point of view.

Profitability Management (2)



Comparison	CO-PA Costing Based	CO-PA Account Based	EC-PCA Profit Center
Currency translation 	<i>Operating concern company code currency</i>	<i>Transaction CompCode/CO area currency</i>	<i>Transaction CompCode/Pft Ctr. currency</i>
Organizational aspects 	<i>Operating concern</i>	<i>Controlling area</i>	<i>Controlling area</i>
Reconciliation with FI 	<i>Posted and Estimated values</i>	<i>Posted values</i>	<i>Posted values</i>

Figure 128: Summary: Profitability Management (2)

This figure shows the different aspects of profitability management from the operations point of view.



LESSON SUMMARY

You should now be able to:

- Analyze the elements important to profitability management



Learning Assessment

1. Which of the following methods is an accounting method?

Choose the correct answer.

- A Cost-of-sales accounting
- B Marginal accounting
- C Inventory accounting
- D Stock list accounting

2. Profit Center Accounting (EC-PCA) is a component of logistics.

Determine whether this statement is true or false.

- True
- False

3. Which of the following values can be analyzed in Profit Center Accounting (EC-PCA) but not in Profitability Analysis (CO-PA)?

Choose the correct answer.

- A Fixed Cost
- B Gross Sales
- C Cash Flow
- D Net Sales

4. A profit center is an organizational subunit that represents internal responsibility.

Determine whether this statement is true or false.

- True
- False

5. Which of the following master data is not a part of Overhead Cost Controlling (CO-OM)?

Choose the correct answer.

- A Business processes
- B House Bank master data
- C Cost centers
- D Internal orders

6. Which one of these items can only be analyzed in costing-based Profitability Analysis (CO-PA)?

Choose the correct answer.

- A Revenues
- B Cost of sales
- C Miscellaneous accrued costs
- D Sales deductions

7. Account-based Profitability Analysis (CO-PA) stores all transactions in the following currencies: transaction currency, local currency, and _____.

Choose the correct answer.

- A Profit Center Accounting (EC-PCA) currency
- B controlling area currency
- C base currency
- D operating concern currency

8. A Controlling area is _____.

Choose the correct answer.

- A an organizational unit used to report internally
- B the key organizational unit in Profitability Analysis (CO-PA)
- C an independent accounting unit within a client
- D a production facility in operations and manufacturing



Learning Assessment - Answers

1. Which of the following methods is an accounting method?

Choose the correct answer.

- A Cost-of-sales accounting
- B Marginal accounting
- C Inventory accounting
- D Stock list accounting

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Determine whether this statement is true or false.

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- False

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Determine whether this statement is true or false.

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- C base currency
- D operating concern currency

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Choose the correct answer.

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- B the key organizational unit in Profitability Analysis (CO-PA)
- C an independent accounting unit within a client
- D a production facility in operations and manufacturing

Lesson 1

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UNIT OBJECTIVES

- Define organizational structures
- Define data structures



Introducing the Concept of an Operating Concern

LESSON OVERVIEW

This lesson describes the various organizational units that are the basis of Management Accounting. In addition, the lesson explains the concepts, characteristics, and value fields of an operating concern.

Business Example

The management of your company wants to implement a profitability accounting application in your SAP system. As a member of the project team, you must recommend whether to implement Profitability Analysis (CO-PA) or classic Profit Center Accounting (EC-PCA). Then you will be responsible for implementing the applications selected.

Your company requires the following information:

- Cross-company and company-specific reporting of contribution margins in multiple currencies
- Multidimensional analysis of sales information, cost-of-sales information, production variances, and period cost information for the various market segments
- Estimated costs for the actual costs posted only at month-end
- Actual period costs (Selling, General, and Administrative; or S, G, and A) for the various organizational entities at month-end
- Analytics by category of value fields and by income statement account

For this purpose, you need to configure the operating concern that represents a sales and marketing reporting unit for a corporation. You also need to understand the concept of characteristics and value fields of an operating concern. For this reason, you require the following knowledge:

- An understanding of the various organizational units that affect CO-PA
- An understanding of the configuration of an operating concern and its attributes



Explain the various organizational units. Identify the basic concepts, characteristics, and value fields of an operating concern. In addition, describe an operating concern and its attributes.

Make participants aware that only one user at a time can change the data structures of an operating concern. Instruct participants that they can display the configuration but they must not make any changes to the operating concern.

This topic is designed to give the participants an overview of the organizational units and the significance of the operating concern. The business scenario emphasizes that the company is an international company divided into various legal entities. For this reason, several

different currencies are used. The different analytics requirements indicate the various characteristics and value fields needed.

Explain the relationship between the various organizational units. In contrast to other Controlling (CO) modules, the sales organization and the corresponding master data play an important role in CO-PA. Explain that it is possible to group several controlling areas in one operating concern; however, all controlling areas must use the same fiscal year variant.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Define organizational structures

Organizational Units That Affect Profitability Analysis

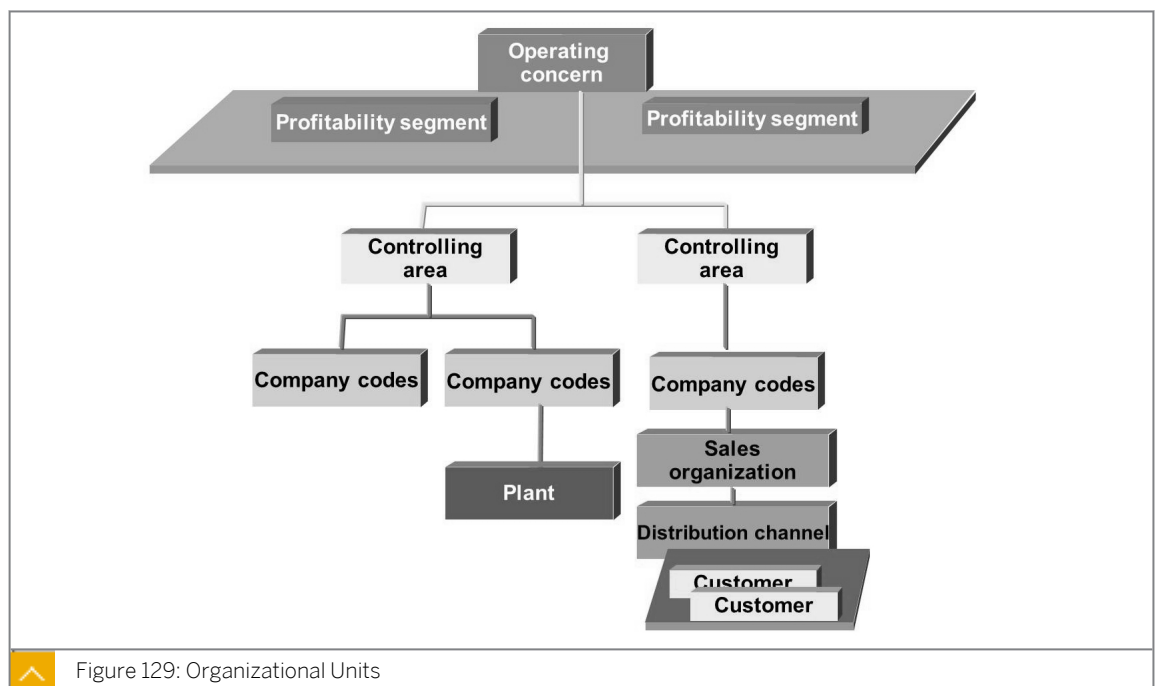


Figure 129: Organizational Units

The operating concern is the key organizational unit in CO-PA. The operating concern defines the extent of the marketing and sales information that can be reported in combination by CO-PA. When organizational structures are defined, one or more controlling areas are assigned to an operating concern. For the sake of simplicity and convenience, companies have a single operating concern if all controlling areas and company codes share the same fiscal calendar.

The controlling area is an organizational unit that delimits the independent cost accounting operations of the company, such as Cost Center Accounting, Profit Center Accounting, and Order Accounting. Company codes are assigned to controlling areas when organizational structures are defined.

The company code is an independent accounting unit within a client. At the company code level, the legal requirements of a balance sheet or a profit and loss statement are fulfilled. Plants are assigned to company codes when you define organizational structures.

The plant represents a production center. It is the primary organizational unit in operations and manufacturing.



How to Display the Operating Concern and its Organizational Assignments

1. In structure maintenance, display the operating concern IDEA.
 - a) In Customizing, choose *Enterprise Structure* → *Definition* → *Controlling* → *Create Operating Concern*.
2. Under *Assignment*, show how the company code 1000 is assigned to the controlling area 1000 and the controlling area is in turn assigned to the operating concern IDEA.
 - a) In Customizing, choose *Enterprise Structure* → *Assignment* → *Controlling* → *Assign Company Code to Controlling Area*.



Note:

Inform the participants that the controlling area can be assigned to an operating concern only after the operating concern has been generated.

3. Under *Assignment*, show how the plant 1000 and the sales organization 1000 are assigned to the company code 1000.
 - a) In Customizing, choose *Enterprise Structures* → *Assignment* → *Logistics - General* → *Assign Plant to Company Code*.
 - b) In Customizing, choose *Enterprise Structure* → *Assignment* → *Sales and Distribution* → *Assign Sales Organization to Company Code*.
4. To give an alternative or supplemental demonstration, show the Customizing Monitor for a complete summary of the organizational assignments of an operating concern.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Tools* → *Analyze Value Flows* → *Check Customizing Settings* (KECM).

Basic Concepts of CO-PA



Explain that certain characteristics, also known as fixed characteristics, are automatically included in all operating concerns. There are also certain technical fields, such as posting period, which are automatically contained in the data structures.

In account-based CO-PA, the cost element is a fixed characteristic. The job of the user is to define any characteristics required but not already available as fixed characteristics.

Value fields are created based on information requirements. They differ from one company to the next and only play a role in costing-based CO-PA. Explain that value fields normally represent a group of cost or revenue elements. For example, the various accounts for discounts can be grouped into one value field. Value fields are either quantity fields or amount fields. Explain that the data structures are valid across all clients of a system.

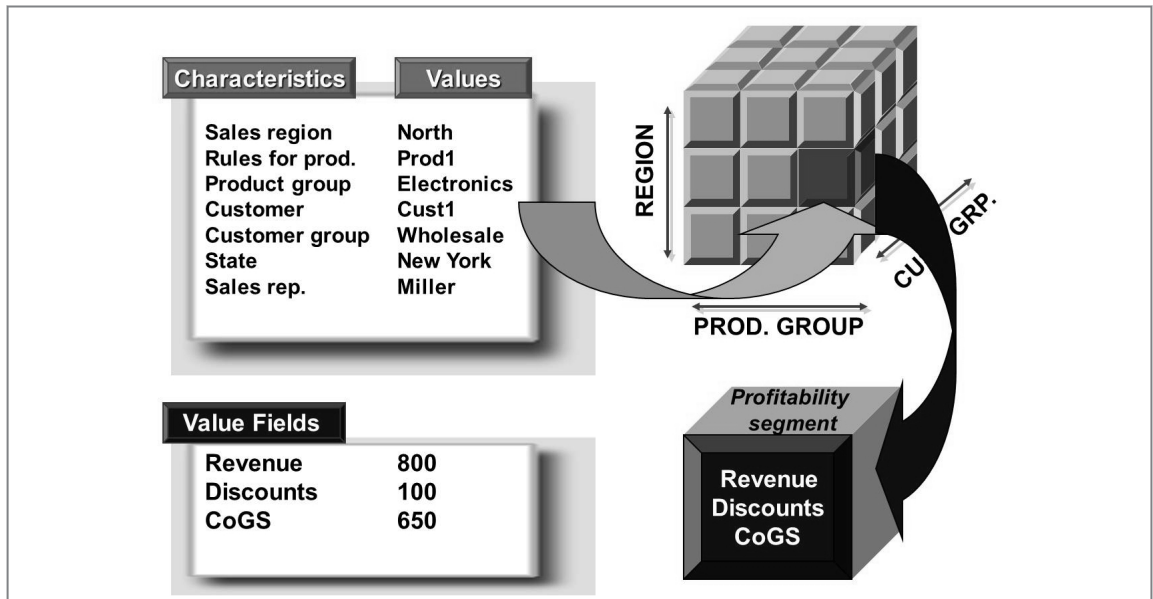


Figure 130: Basic Concepts of CO-PA

The basic concepts of CO-PA include characteristics, characteristic values, profitability segments, and value fields.

Characteristics are those entities that you want to report on. Examples: Divisions, regions, products, and customers.

Characteristic values are the values that the characteristics in your report should display. Examples: Region is a characteristic with south as its value and company code is a characteristic with 1000 as its value.

Profitability segments are the technical definitions of combinations of several characteristics and their values. Examples: Combination of North region, Prod1 product, and Sales Rep Miller.

Value Fields are the amount and quantity fields with which performance can be measured and analyzed. Examples: Gross sales, surcharges, discounts, and cost of sales.

Categories of Characteristics

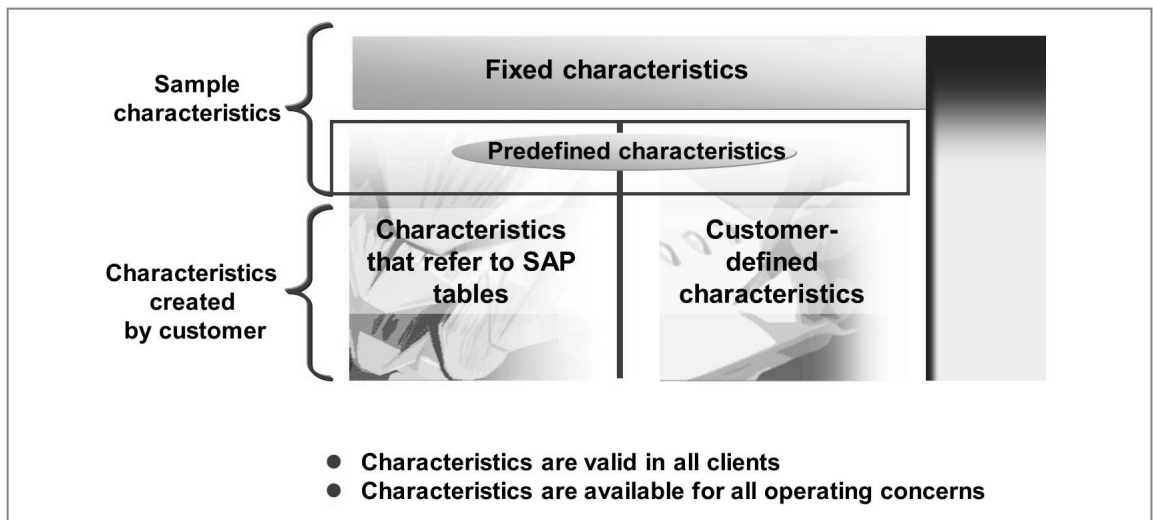


Figure 131: Categories of Characteristics

Characteristics are the analytic dimensions of CO-PA. Characteristics define items or objects that the user can evaluate. Several characteristics, such as sales organization, customer, and product are predefined automatically for every operating concern. These characteristics are known as fixed characteristics.

In addition to the fixed characteristics, up to 50 non-fixed characteristics can be added to an operating concern.

Before you can use the non-fixed characteristics to define an operating concern, they must be added to the field catalog. You can access the characteristics in the field catalog in any client.

The field catalog contains some suggested characteristics for use in a new operating concern definition.

The ways to add other characteristics to the field catalog are as follows:

- Choose an existing field from certain SAP tables, with a maximum length of five characters.
- Create a characteristic independently. Make sure that the characteristic begins with *WW* and contains four to five characters in total.

Behind every characteristic, there is a check table with valid characteristic values for CO-PA. In this way, the data that flows into CO-PA is checked. When you manually create a new characteristic in the field catalog, you can decide if the system should generate a check table for this characteristic.

Categories of Characteristics – Examples



The categories of characteristics are described in the following table:

Characteristic	Description	Value Definition	Example
Referenced to SAP tables	Reference to a table field, such as to material group in material master (MM)	In other applications, such as MM	Material group (MATKL)
Custom created	CO-PA specific fields without reference to existing tables	In CO-PA	Strategic business unit (WWxxx)
Predefined	Sample characteristics Example characteristics	In other applications or in CO-PA	Customer group
Fixed	Mandatory characteristics required by the system	In other applications, such as organizational structures	Company code

You can divide the characteristics into the following categories according to how and when they are defined:

- Referenced to SAP tables

You can use characteristics that already exist in other applications when you define your operating concerns. For example, you can copy fields from tables for customer master records, material master records, and sales documents. You can also copy partner roles defined in the structure PAPARTNER in the Sales and Distribution (SD) application as characteristics in CO-PA.

- Custom created characteristics

You can create characteristics that are only required in CO-PA and define your own derivation strategy to derive values for these characteristics.

- Predefined characteristics

In addition to fixed characteristics, a number of other predefined characteristics, such as customer group, customer district, and country characteristics are available in the field catalog. You can add these characteristics to your operating concern.

- Fixed characteristics

A number of fundamental characteristics, such as product number, company code, billing type, business area, and sales order characteristics are automatically predefined in every operating concern.

Categories of Value Fields

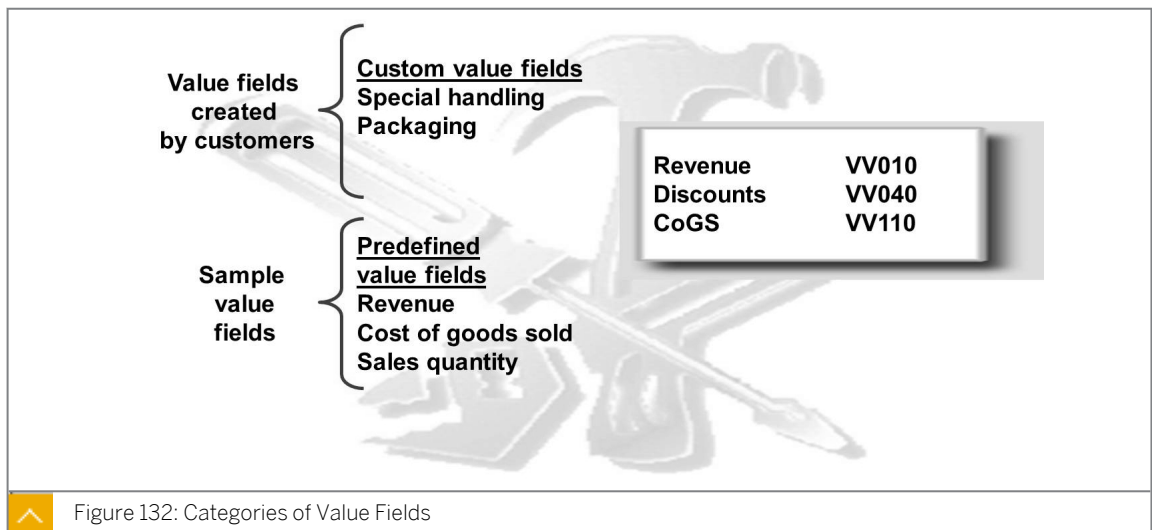


Figure 132: Categories of Value Fields

In costing-based CO-PA, value fields store the base quantities and amounts for reporting. Value fields can either be highly summarized, such as representing a summary of cost element balances, or highly detailed, such as representing just one part of a single cost element balance.

The sales-related key figures, such as revenue types, discounts, and surcharges, are presented in a detailed way. In comparison, the items based on periodic costs, such as period cost types, are aggregated.

Unlike characteristics, there are no fixed value fields for a new operating concern.

Value fields can be maintained in the field catalog as follows:

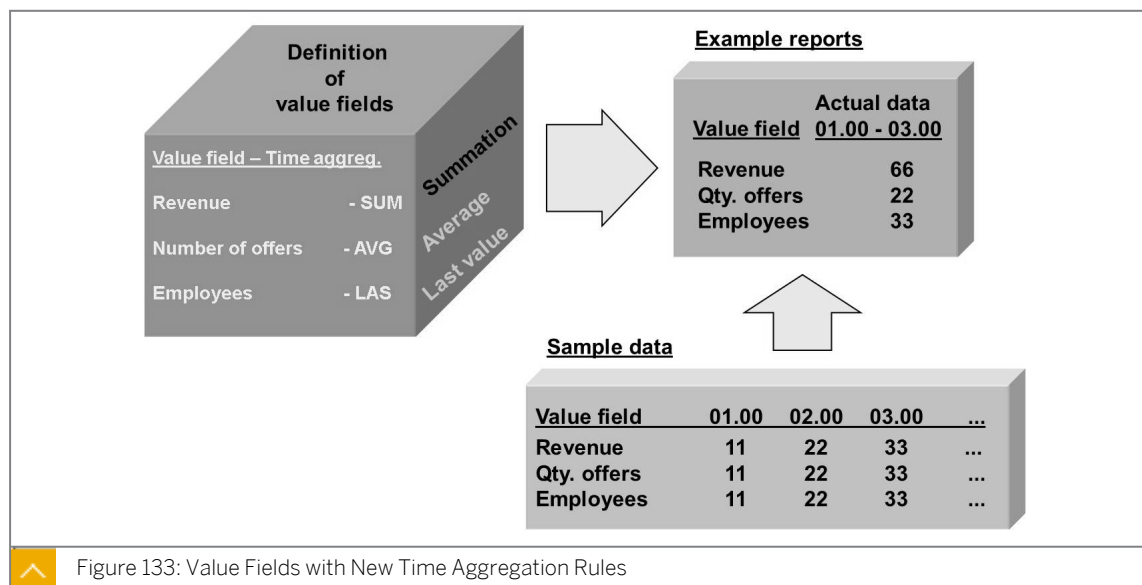
All the value fields must exist in the field catalog before they can be used to define a new operating concern. The field catalog is valid in all clients. The field catalog contains some suggested value fields, which you can use in a new operating concern. You can define value

fields independently, which should begin with VV, and should be four to five characters in total.

It is not necessary to create the value fields, such as net sales and contribution margin. These items are calculated from the base values stored in the value fields when the report is executed. If you do not create value fields for calculated items, the data storage requirements are minimized.

In account-based CO-PA, all values are updated to Cost and Revenue Elements. Each amount is stored in up to three different currencies under fixed basic key figures, which are accessed in reporting.

Value Fields with New Time Aggregation Rules



You can use value fields with the aggregation rules sum (SUM), average (AVG), and last (LAS) in CO-PA drilldown reports.

Value fields are defined when you create them in the field catalog, and then pulled into the data structures when you create your Operating Concern.



How to Evaluate the Configuration of Characteristics and Value Fields

1. Display all characteristics and show the information behind a characteristic, such as customer group.
Highlight the type of characteristic, its origin, and explain the concept of a check table.
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Structures* → *Define Operating Concern* → *Maintain Characteristics*.
 - b) Select *All Characteristics* and then choose the *Display* pushbutton.
 - c) Show the characteristics in the field catalog.
 - d) Choose *Extras* → *Fixed fields* to display the fixed fields and explain that fixed fields are delivered by SAP.

- e) Show the technical fields. Explain that they are related to report dimensions and technical identifiers, which are saved with each record.
- f) Close the *Fixed Fields* dialog box and return to the *Edit Characteristics* screen.
2. Create two characteristics, one from the MARA table and the other user-defined.
- a) For the first characteristic, choose the *Create/Change* pushbutton and then select *Transfer from SAP Table*.
For the table, enter **MARA** and then choose *Enter*.
From the table MARA (reference table), choose the *LABOR* (Lab/Office) field and then choose *Enter*.
Choose *Save* and then choose *Activate*.
- b) To create the second characteristic as the user-defined characteristic, under *Create Characteristic*, enter **WWMGR** and then choose the *Create/Change* pushbutton.
In the dialog box that appears, select *User Defined* and name it **Regional Manager**. Choose *With own maintenance* and then choose *Enter*. It has the data type CHAR and is a 3-digit field.
Mention the corresponding check tables, T25**, and that these tables are created either automatically or manually. Save and choose *Automatic* for assigning the check table. Then, choose *Activate*.
When finished, return to the *Edit Characteristics* screen. Explain some of the other possible options when creating characteristics, for example, creating characteristics by referring to any data element.
3. Display the list of value fields by choosing the Value Fields pushbutton on the Edit Characteristics screen. Explain that value fields come in two categories, quantity or currency, and can have various aggregation levels. For example, the list of value fields can be as follows:
- Revenue
Each posting made to this field should be SUMMARIZED.
 - Number of employees
Only the LAST posting for a given period should reflect in CO-PA.
 - Available stock
The AVERAGE number of items on hand should reflect in CO-PA.
- a) Create a value field, VVSPE, and name it as Special Handling. Choose “summation” as the aggregation type and “Amount” as the value field category.
- b) Save and activate the value field.
In account-based PA, the account number serves as the counterpart to the value field. Account-based PA works with a fixed basic key figure. In addition to the sales quantity, every posted value on a cost or revenue element is listed in three currencies.

Operating Concern Attributes

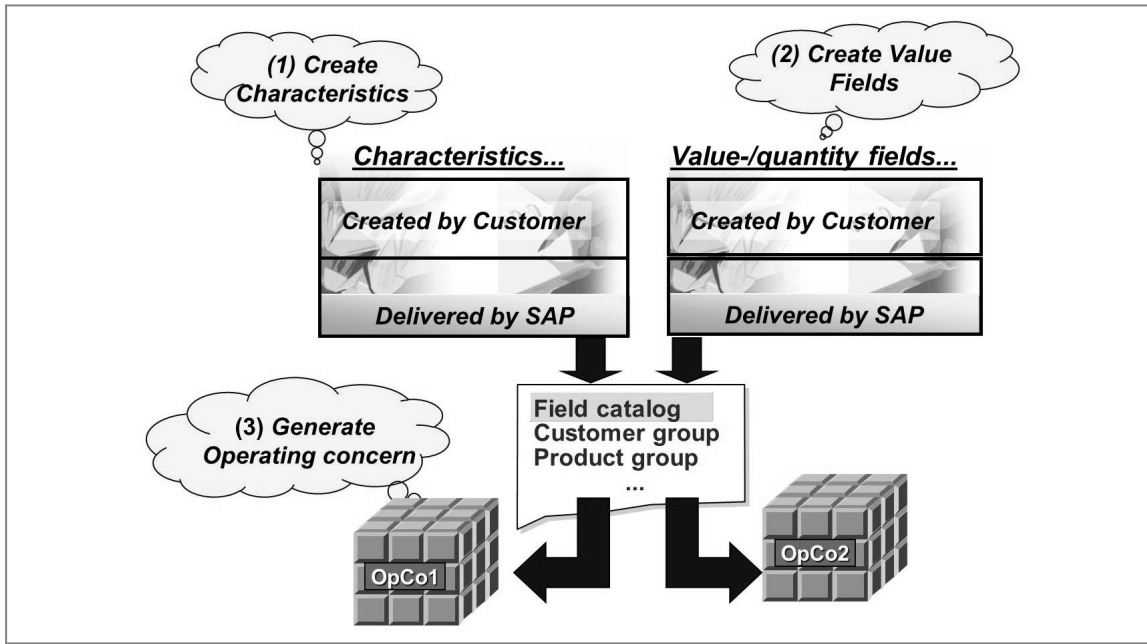


Figure 134: Steps in Defining an Operating Concern



Figure 135:

You define the structure of your operating concern when you create it. You can do this by selecting the characteristics you want to use in the data structures of the operating concern. In costing-based CO-PA, select the value fields that you want to use. The structure of an operating concern is valid in all clients.

Defining Operating Concern and Attributes

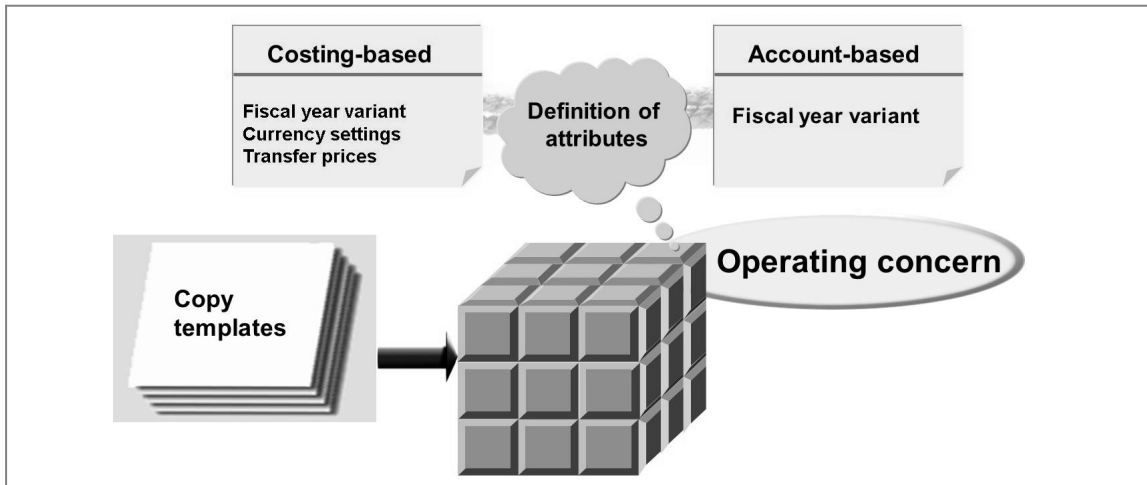


Figure 136: Defining Operating Concern and Attributes

Attributes are client-specific parameters of an operating concern. They have different effects, depending on the type of CO-PA you are working in.

The attributes of an operating concern are as follows:

- Currency types for Costing-based CO-PA
 - Operating concern currency

In costing-based CO-PA, the actual data is posted in the operating concern currency. You can change the operating concern currency if no data has been posted in the operating concern.
 - Company code currency

You have the option of storing all data in the currency of the relevant company code. This option is relevant only if your company operates internationally and is concerned with daily fluctuations in exchange rates. This attribute allows you to avoid differences due to fluctuations in exchange rates and helps you to reconcile your CO-PA data directly with Financial Management.
 - Profit center valuation

In addition to storing data in the operating concern currency and company code currency using the legal company code and valuation view, you can also store data in the currencies that are valued from the viewpoint of individual profit centers.
- Fiscal year variant

The fiscal year variant determines the number of posting periods for each fiscal year. Because each controlling area assigned to the operating concern and each company code assigned to controlling areas have their own fiscal year variant, the variant you choose for the operating concern must agree with the assignment for other areas.

**How to Evaluate the Configuration of an Operating Concern**

Create an operating concern and define its attributes.

1. Create an operating concern named T001. Maintain the attributes and mention the fiscal year variant and the various currencies that can be displayed.

In Customizing, choose *Controlling* → *Profitability Analysis* → *Structures* → *Define Operating Concern* → *Maintain Operating Concern*.
2. Create the data structures for the operating concern T001. When you choose characteristics, choose the characteristics you have created. Similarly, implement this step for value fields. Do not activate or generate this operating concern; just demonstrate the steps because they will not create the operating concern in class.
 - LABOR (CHAR)
 - WWMGR (CHAR)
 - VVSPE (VALUE FIELD)
 - STDPR (VALUE FIELD)
3. Save and then activate the operating concern. When prompted, choose ONLINE.

When this process takes place, explain that you cannot maintain the operating concern or make postings to any of its tables because data tables are being rebuilt.

Begin presenting the next graphics as your operating concern begins the generation process. Note that to get to the “Generate” step, you need to use the green arrow once. In addition, the “Activate” step also saves.



Evaluate the Basic Configuration of an Operating Concern

Business Example

Your company has legal entities in Germany, Italy, and the United States, so it must report sales and profitability both across the company in a group currency and in the local currency of each legal entity. The sales managers require the following data:

- Summarized sales performance figures, such as revenue, discounts, and surcharges, both along and across the lines of the sales structure, product lines, and customers
- Sales and marketing costs along these lines

Evaluate the options available for the organizational structures for CO-PA.

Evaluate the configuration of an operating concern.

1. Check the basic settings and organizational assignments for the IDEA operating concern using the Customizing Monitor.

Is the controlling area 1000 assigned to the IDEA operating concern?

Does the IDEA operating concern have the same fiscal year variants as the controlling area 1000?

Does the assigned company code 1000 also have the same fiscal year variant?

What chart of accounts do the controlling area and the company code have?



Evaluate the Basic Configuration of an Operating Concern

Business Example

Your company has legal entities in Germany, Italy, and the United States, so it must report sales and profitability both across the company in a group currency and in the local currency of each legal entity. The sales managers require the following data:

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- Sales and marketing costs along these lines

Evaluate the options available for the organizational structures for CO-PA.

Evaluate the configuration of an operating concern.

1. Check the basic settings and organizational assignments for the IDEA operating concern using the Customizing Monitor.

Is the controlling area 1000 assigned to the IDEA operating concern?

Does the IDEA operating concern have the same fiscal year variants as the controlling area 1000?

Does the assigned company code 1000 also have the same fiscal year variant?

What chart of accounts do the controlling area and the company code have?

- a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Tools* → *Analysis* → *Check Customizing Settings*.



Hint:

If prompted, enter **IDEA** in the *Operating Concern* field, select the *costing-based* radio button, and then choose *Continue*.

- b) On *Customizing Monitor - Organizational Structures: Initial screen*, choose *Operating concern: IDEA* → *CO Area: 1000* → *Company Code: 1000* → *Sales Org.*

Note the sales organizations assigned to this company code.

- c) Choose *Operating concern: IDEA* → *CO Area: 1000* → *Company Code: 1000* → *Plant*.

Note the plants assigned to this company code.

- d) Choose *CO Area: 1000* and *Company Code: 1000* and note the *Fiscal Year Variant*. Both of them have the same *Fiscal Year Variant* value, *K4*.

- e) Choose *CO Area: 1000* and *Company Code: 1000* and note that both use the same *Chart of Accts* value, *INT*.

- f) All assigned organizational units are listed in the *Overview: Organization structures* of the operating concern, along with detailed information from the respective master data.



LESSON SUMMARY

You should now be able to:

- Define organizational structures



Defining Data Structures

LESSON OVERVIEW

This lesson defines data structures and identifies the transaction data structures. In addition, this lesson explains the Profitability Analysis (CO-PA) database structures and the operating concern templates.

Business Example

The management of your company wants to implement a profitability accounting application in your SAP system. As a member of the project team, you must recommend whether to implement CO-PA or classic Profit Center Accounting (EC-PCA). Then, you will be responsible for implementing the selected applications.

Your company requires the following information:

- Both cross-company and company-specific reporting of contribution margins in multiple currencies
- Multidimensional analysis of sales information, cost-of-sales information, production variances, and period cost information for the various market segments
- Estimated costs for the actual costs posted only at month-end
- Actual period costs (Selling, General, and Administrative (S, G, and A)) for the various organizational entities at month-end
- Analytics by value category and by income statement account

For this purpose, you need to configure the operating concern, which represents a sales and marketing reporting unit for a corporation. You also need to understand the concept of characteristics and value fields. For this reason, you require the following knowledge:

- How to define data structures
- How to identify transaction data structures
- How to describe the CO-PA database structures and the operating concern templates



In this lesson, explain the importance of data structures in an operating concern and the transaction data structures. Describe the CO-PA database structures and the operating concern templates.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Define data structures

Data Structures



Explain the various steps that are involved in defining an operating concern. First, explain that characteristics and value fields are defined as independent entities of any operating concern. Operating concerns are then created on the basis of these characteristics and value fields.

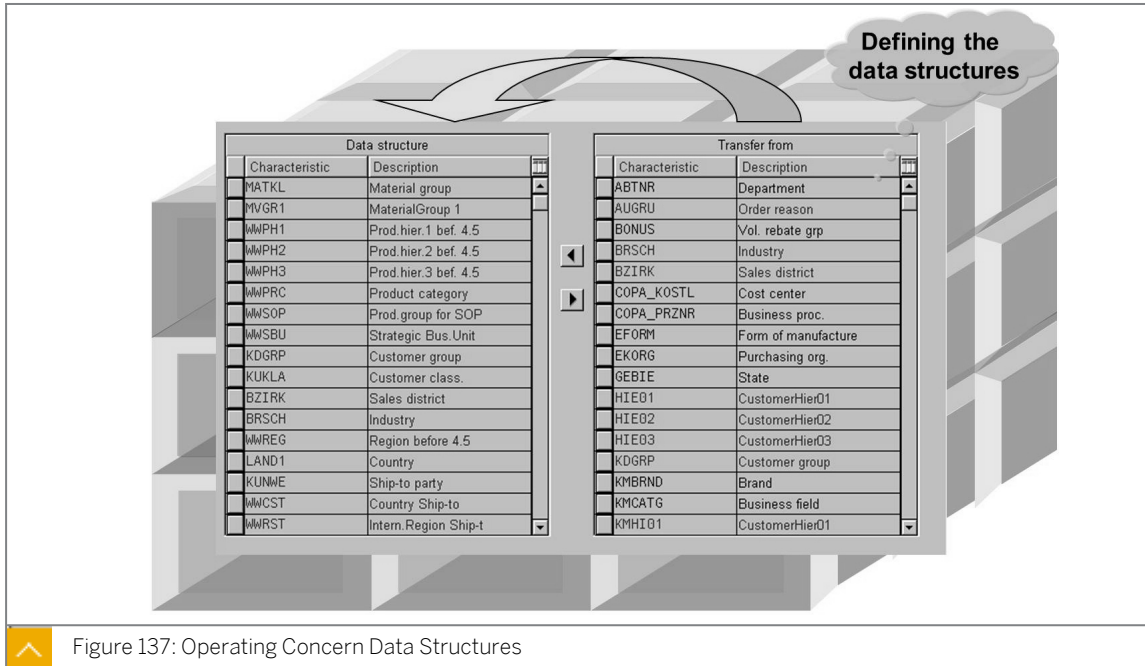


Figure 137: Operating Concern Data Structures

The following steps describe the process for defining data structures:

1. Defining attributes

Define attributes of the operating concern and activate the environment (up to 4.6B generation) This process generates all the tables, programs, and technical objects required to support the operating concern that you have defined. After you generate the operating concern and before you activate CO-PA for data entry, add the valid characteristic values to the check tables generated for the new characteristics.

2. Defining data structures

Copy the required characteristics and value fields (applicable for costing-based CO-PA) to the operating concern, save them, and activate the data structures.

Reactivate the environment after you change the data structures of an operating concern. For example, reactivate the environment after you add a new characteristic or a value field.

**Note:**

The regeneration process does not affect any existing transaction data. The regeneration process does not automatically back populate any new fields for existing transaction data either, although this step may sometimes be carried out using the CO-PA realignment or periodic valuation functions.

The regeneration process does not affect any characteristic values that have already been entered in check tables for user-defined characteristics.



You can draw a simple example of a sales order. It is important that participants understand a profitability segment and how it is created. Explain that the system creates profitability segments dynamically when a unique combination of characteristic values is posted to CO-PA.

Sales Order 1000:

Customer 1000 Product X: P-100

Revenue 100,000 Tables: CE1, CE3, CE4

Product Y: P-101

Revenue: 120,000 Tables: CE1, CE3, CE4

Sales Order 2000:

Customer 1000 Product X:

Revenue 50,000 Tables: CE1, CE3

Content in CE4: Profitability segment 1

Customer 1000, Product X...

Content in CE3: Profitability segment 1

Revenue 150,000...

CO-PA Transaction Data Structures

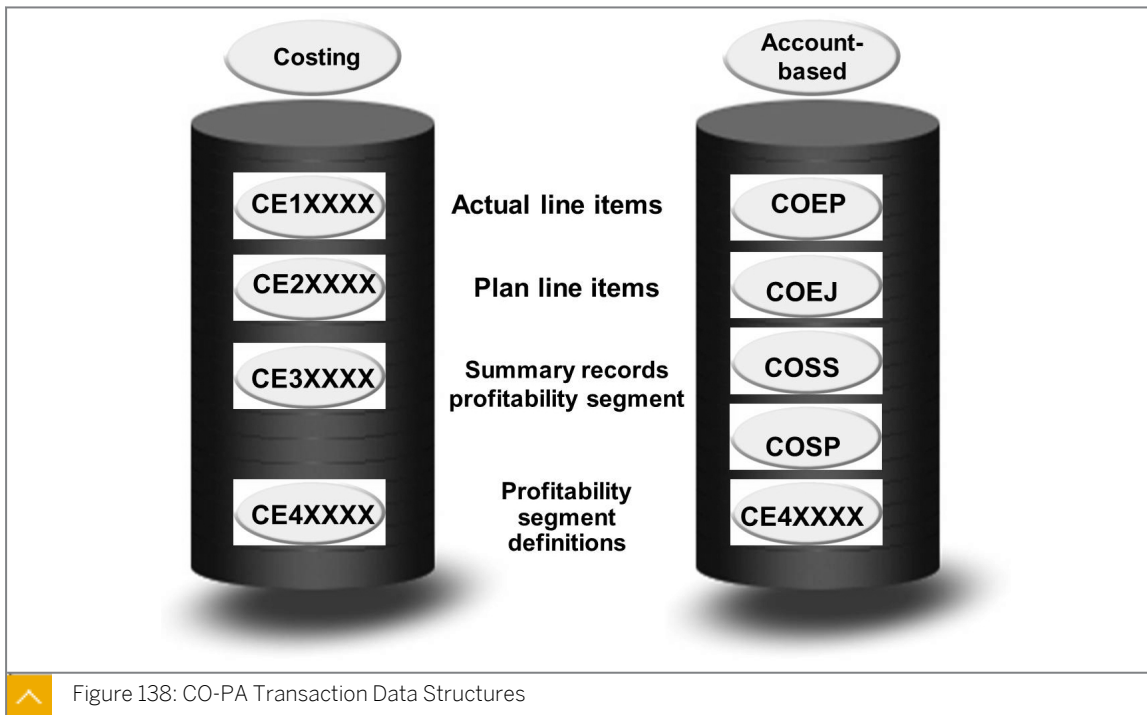


Figure 138: CO-PA Transaction Data Structures

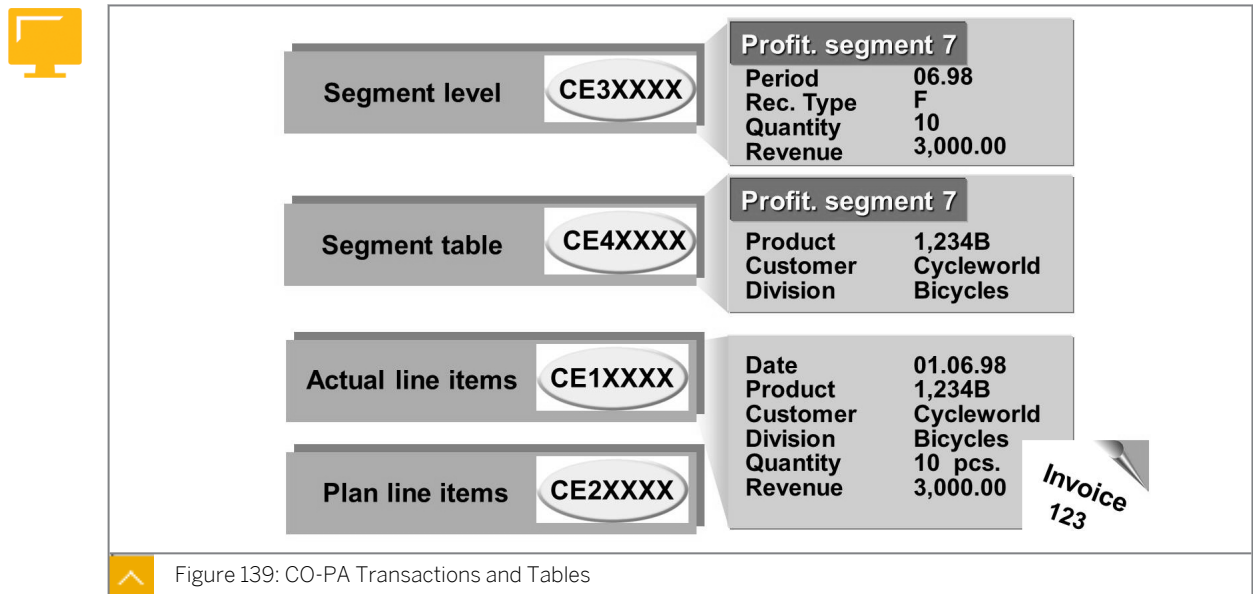
Costing-based CO-PA stores its transaction data in its own data tables. The system creates these tables when it activates and generates the operating concern. Because costing-based CO-PA stores its transaction data in its own data tables, it does not affect the speed at which reports are executed in other CO applications.

Account-based CO-PA stores its transaction data in the transaction data tables for Overhead Cost Management. As a result, the account-based CO-PA data affects the speed at which reports are executed for other CO applications that share the same transaction data tables.

The system stores the definitions of profitability segments for both CO-PA submodules in the same table, CE4XXXX (where XXXX = operating concern). The system always accesses this segment definition table when posting the transaction data for costing-based or account-based CO-PA.

Profitability segments represent the account assignment objects for CO-PA. These segments are unique combinations of characteristic values that are created by the system. The characteristic values are numbered automatically by the system from the information in the originating transactions.

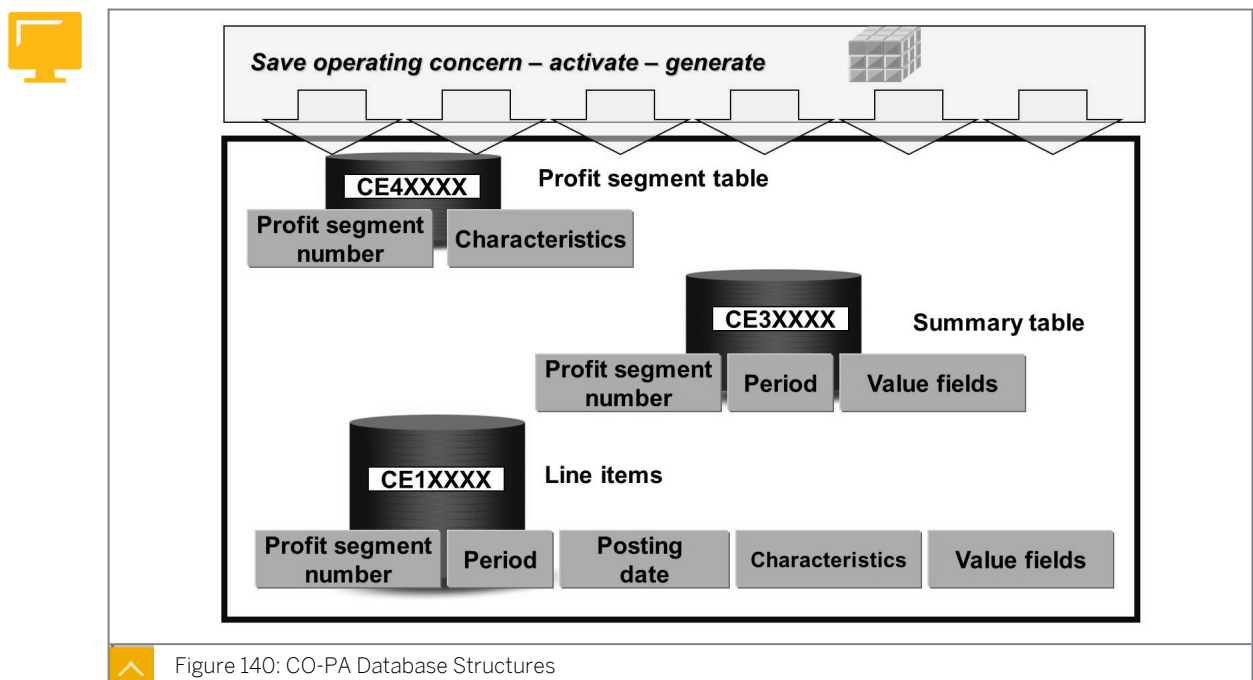
CO-PA Transactions and Tables



The tables CE3XXX and CE4XXX work effectively together to store the summarized transaction information, both actual and plan, for costing-based CO-PA.

The CO-PA drilldown reporting tool accesses the data in the tables CE3XXX and CE4XXX. You can access the line item data and the information from the tables CE1XXX and CE2XXX through line item display features.

CO-PA Database Structures



The data of CO-PA is divided into characteristics and value fields. The system stores the characteristics in the data division of the table CE4XXX. The key of the table CE4XXX consists of the profitability segment number that is used as a join field for the table CE3XXX.

The key of the table CE3XXXX consists of the profitability segment number, the posting period, and some other technical fields that are not listed. The value fields are also specified.

he table CE4XXXX represents the profitability segments that are created based on business considerations. The table CE4XXXX is created when an operating concern is created. The table CE3XXXX contains the values posted to the profitability segments, broken down into the posting period.

The typical record lengths are as follows:

- CE4XXXX = 250 bytes
- CE3XXXX = 2000 bytes

Segment Level and Non-Segment Level Characteristics



Name an operating concern and then define its attributes. After the attributes are defined, define the data structures for the operating concern by selecting the required value fields and characteristics for the profitability segment. Then save, activate and generate the data structures.

During the generation process, the system creates the tables CE1XXXX through CE8XXXX and check tables. The tables CE1 through CE4 are of particular significance for the market segments. It is important to mention that the data in costing-based CO-PA is stored in separate tables, and the data for account-based CO-PA is stored in the same tables as the other CO modules.



Hint:

CE4 contains only the characteristic values and profit segment numbers. CE3 is the table accessed by drilldown analytics. It contains the profit segment number, certain technical characteristics, and the values for value fields. CE1 contains all characteristics and value fields as well as technical characteristics.

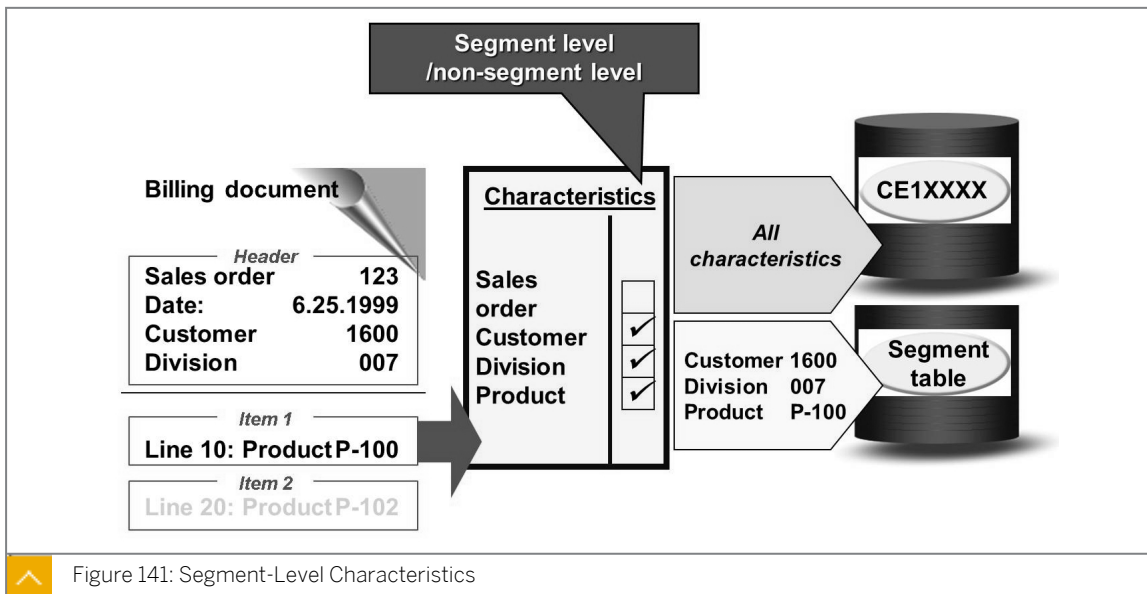


Figure 141: Segment-Level Characteristics

To enhance performance, it is recommended that the number of profitability segments be kept as low as possible so that the quantity of totals records required in the profitability segment also remains low. You can achieve low quantities by restricting the selection of characteristics for the profitability segment.

You can configure the SAP system so that certain characteristics are not used in defining profitability segments. The impact of leaving out certain characteristics is that the values for these non-segment-level characteristics appear on CO-PA line items but are unavailable for summary-level reporting with the CO-PA drilldown reporting tool.

For example, you must have access to the number of the order that has occurred in Sales and Distribution (SD) in every CO-PA line item (CE1). However, you are not required to save a new totals record at the object level (CE3) for every line item that is created during the transfer of transactions from SD. This save would create as many summary records as line items.

You can individually adjust the characteristics that have been used or not used at the object level and make different settings for the costing-based and account-based CO-PA. Certain fixed characteristics are not used at the object level. However, you can change this if required.

It is recommended that data must be summarized at a higher level, something other than the customer or product level, for account-based CO-PA to minimize the number of summary records. The data must be summarized at a higher level because the system stores its transaction data in the tables that are shared with other Management Accounting applications.



How to Evaluate the Configuration of Segment Level Characteristics

1. Display the segment level characteristics in CO-PA and explain the significance and impact of the segment level characteristics in CO-PA. All characteristics are contained in a table. You can see that you have set these characteristics to "not used", and you have not defined them at the object level for costing-based CO-PA only or for costing-based and account-based CO-PA. This table works backwards because here you define which characteristics should be at the non-segment level. The example that is normally cited is the sales order number or sales order line number that you want to see at the line item level but you probably will not want as a drilldown characteristic.

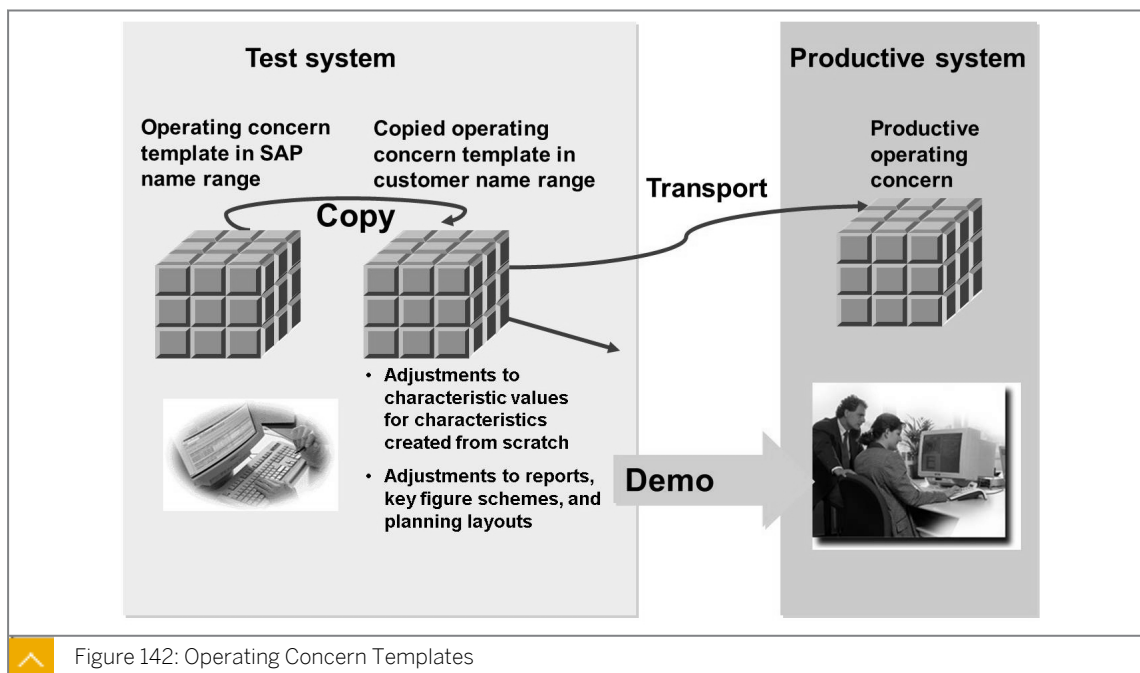
In Customizing, choose *Controlling* → *Profitability Analysis* → *Structures* → *Define Profitability Segment Characteristics (Segment-Lvl Characteristics)*.

Operating Concern Templates



Operating concern templates were introduced as of Release 4.6. In previous releases, very few example data and configurations were set up for Client 000. As a result, complete configuration has been performed up to now to test CO-PA.

Templates are a simple option for creating example data for checking the possibilities of CO-PA. Note that CO-PA is often a Phase II project and the implementation plan has to be justified to the executive board. The operating concern template is of great help here. Quickstart takes this concept a step further. Using the options SAP Operating Concern Template or Copy Operating Concern including the Customizing, you can create an operating concern quickly.



CO-PA provides operating concern templates, predefined sample operating concerns, and an environment to display the Customizing settings for these operating concerns. You can change the Customizing settings and copy them.

The following operating concern templates are delivered by SAP:

- S_AL – Template for route profitability
- S_GO – Cross industry template
- S_CP – Consumer goods industry template

Operating concern templates offer the following advantages:

- They enable you to demonstrate and gain an insight into CO-PA without performing Customizing.
- They simplify Customizing in CO-PA. If necessary, you can adjust your Customizing settings for an operating concern template as required, copy these settings, and then use the copied and adjusted operating concern productively.

Quickstart

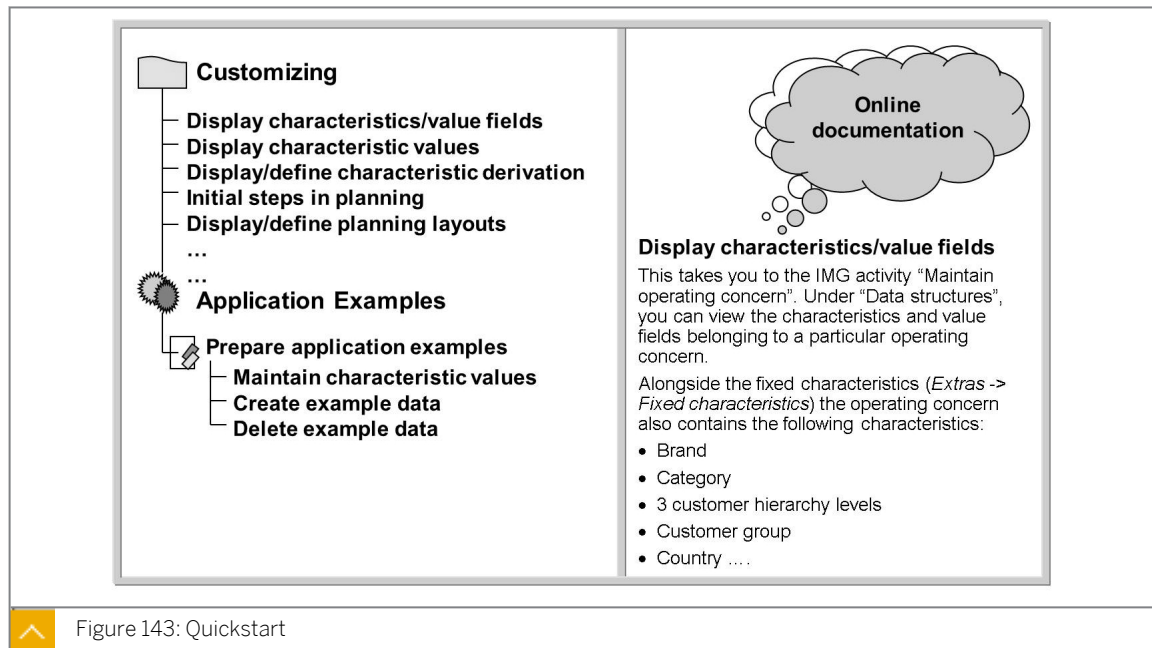


Figure 143: Quickstart

With an operating concern template, you can gain an initial overview of CO-PA without any specialist knowledge and without carrying out any prerequisite settings. Preset operating concerns are also available, allowing CO-PA to be integrated into your productive system quickly. If required, you can customize these operating concern templates and reset the templates to their original settings.

To use a template, start the transaction for operating concern templates and choose a template.

The details view provides an overview of the delivered settings and the modifications that you can make. By choosing *Application Examples*, you can view reports and planning layouts. The system fills the application examples with example data to demonstrate clearly how the application works. You can delete the example data later.

If you want to use an operating concern template for your CO-PA, first copy it. You can find this function under *Tools*, from where you can also choose to reset an operating concern template back to its initial state.



How to Use the Operating Concern Templates

1. Show operating concern templates and the use of sample data.

a) Run transaction code `ORKE`.

In Customizing, choose *Controlling* → *Profitability Analysis* → *Structures* → *Define Operating Concern* → *Sample Operating Concerns* → *Use SAP Operating Concern Templates*.

b) Double-click *Quickstart Template S_GO* and, if prompted, choose *Yes* to delete the existing data.

c) Go back using `F3`.

2. Generate sample data for reporting.
 - a) Choose *Quickstart Template S_GO* → *Application Examples* → *Prepare application examples* → *Create Example Data*.
 - b) Select the current year and choose *Create planning data*. *Create planning data* will generate sample data for reporting and planning. In addition, point out the context-sensitive help on the right. Run a sample report.
 - c) Next, choose *Perform Application Examples* → *Execute Profitability Report* and then choose *SGOB01*.
3. For the report parameters, choose the year of your sample data, plan/act. indicator 1, and version 0.
4. Show the report and then exit to return to the Quickstart template.
5. To access a configuration activity, double-click one of the steps under Customizing.



Note:

After system upgrades or hot packages installations, the sample operating concern has to be reconfigured. If this situation is encountered, choose confirm when prompted to rebuild the operating concern. Then, proceed with the demonstration. You might also want to show the report SGOB01 first, to demonstrate the fact that no data exists before you generate the data for the sample year.

6. Run transaction code `KEBC` to set your operating concern back to IDEA.
-



Display Data Structures, Characteristics, and Value Fields

Business Example

The following requirements apply for the value fields and characteristics needed for profitability reporting in your company:

- Your sales manager requires summarized sales performance figures, such as gross revenue, discounts, and surcharges, both along and across the lines of the sales structure, product lines, and customers of the company.
- The sales manager also wants to view sales and marketing costs along these lines.

Evaluate the different sources of characteristics and the settings available for value fields.

Task 1

In the CO-PA settings menu, display all defined characteristics.

1. Display all the characteristics displayed in the field catalog.
2. What is the check table for the *Sales district* characteristic?
3. What is the table of origin for the *Customer Class.* characteristic?

Task 2

Based on the requirements of your project team, defined in the company scenario, you determine that the following characteristics and value fields are required for reporting. In the data structures of the operating concern, determine which of the following items are value fields, non-fixed characteristics, fixed (delivered) characteristics, and technical fields:

Customer, Customer Group, Material Group, Controlling Area, Cost Element, Revenue, Customer Discount, Profit Center, Price Reduction, Sales Organization, Variable Production Costs, Sales District, Posting Date, Fiscal Year, and Number of Employees



Note:

The overview list contains all user-defined characteristics, default characteristics, and characteristics selected from the reference tables. It does not include fixed characteristics or technical fields.

1. Which characteristics are non-fixed characteristics?
2. Which characteristics are fixed characteristics?
3. Which fields are technical?

4. Display the Strategic Business Unit characteristic. What type of characteristic is the Strategic Business Unit?
5. Display the Region (*REGIO*) characteristic. Is this characteristic grouped with another characteristic?
Why and with what consequences?
6. Which fields are value fields?
7. What are the aggregation settings for the *Number of Employees* value field?
Why would you decide to use this field?



Display Data Structures, Characteristics, and Value Fields

Business Example


The following requirements apply for the value fields and characteristics needed for profitability reporting in your company:

- Your sales manager requires summarized sales performance figures, such as gross revenue, discounts, and surcharges, both along and across the lines of the sales structure, product lines, and customers of the company.
- The sales manager also wants to view sales and marketing costs along these lines.

Evaluate the different sources of characteristics and the settings available for value fields.

Task 1

In the CO-PA settings menu, display all defined characteristics.

1. Display all the characteristics displayed in the field catalog.
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Structures* → *Define Operating Concern* → *Maintain Characteristics*.
 - b) On the *Edit Characteristics: Start* screen, select the *All Characteristics* radio button and then choose the *Display* pushbutton.
2. What is the check table for the *Sales district* characteristic?
 - a) On the *Display Characteristics: Overview* screen, double-click the row for the *Sales district* characteristic.
 - b) On the *Display Char. BZIRK* screen, all information about the *Sales district* characteristic is displayed. The *Check table* is *T171*.
 - c) Return to the *Display Characteristics: Overview* screen.
3. What is the table of origin for the *Customer Class.* characteristic?
 - a) On the *Display Characteristics: Overview* screen, choose  (*Find*).
 - b) In the *Determine Search Criterion* dialog box, enter **KUKLA** in the *Object name* field and choose *Continue*.
 - c) On the *Display Characteristics: Overview* screen, select the row that has the value *KUKLA* in the *Char.* column.
 - d) Check that the *Origin Table* column has the value *KNA1*.



Note:
Remain in this screen for the next step.



Task 2


Based on the requirements of your project team, defined in the company scenario, you determine that the following characteristics and value fields are required for reporting. In the data structures of the operating concern, determine which of the following items are value fields, non-fixed characteristics, fixed (delivered) characteristics, and technical fields:

Customer, Customer Group, Material Group, Controlling Area, Cost Element, Revenue, Customer Discount, Profit Center, Price Reduction, Sales Organization, Variable Production Costs, Sales District, Posting Date, Fiscal Year, and Number of Employees



Note:
The overview list contains all user-defined characteristics, default characteristics, and characteristics selected from the reference tables. It does not include fixed characteristics or technical fields.


1. Which characteristics are non-fixed characteristics?
 - a) On the *Display Characteristics: Overview* screen, select the *Description* column and choose  (*Sort Ascending*). You will find that *Customer Group*, *Material Group*, and *Sales District* are all non-fixed characteristics.
2. Which characteristics are fixed characteristics?
 - a) On the *Display Characteristics: Overview* screen, choose *Extras* → *Fixed fields*.
 - b) In the *Fixed fields* dialog box, on the *Charact.* tab page, note that *Customer*, *CO Area*, *Profit Center*, and *Sales Org.* are all fixed fields.
3. Which fields are technical?
 - a) In the *Fixed fields* dialog box, choose the *Techn. fields* tab page. Check that *Posting date*, *Fiscal Year*, and *Cost Element* are technical fields.
 - b) Choose *Continue*.
4. Display the Strategic Business Unit characteristic. What type of characteristic is the Strategic Business Unit?
 - a) On the *Display Characteristics: Overview* screen, select the row with the value *WWSBU* in the *Char.* column and choose  (*Details*).
 - b) On the *Display Char. WWSBU* screen, check that the *Data type/length* field displays *CHAR 8*. *WWSBU* is user-defined as the field name begins with *WW*.
 - c) Return to the *Display Characteristics: Overview* screen.
5. Display the Region (*REGIO*) characteristic. Is this characteristic grouped with another characteristic?
Why and with what consequences?

- a) On the *Display Characteristics: Overview* screen, select the row with *REGIO* value in the *Char.* column and choose the *Details* pushbutton.
 - b) On the *Display Char. REGIO* screen, check that the *LAND1* and *Country* values are displayed in the *Char.* and *Description* columns, respectively.
 - c) On the *Display Char. REGIO* screen, double-click the *Check table* field that has the value *T005S*.
 - d) On the *Dictionary: Display Table* screen, you can see that both the *COUNTRY* and the *REGION* characteristics are part of this table. Therefore, when saving data to the *REGION*, the *COUNTRY* is also saved.
Additionally, when you execute a report that contains *REGION*, *COUNTRY* is also displayed, even if only the *REGION* characteristics are assigned to the report.
 - e) Return to the Customizing screen.
6. Which fields are value fields?
- a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Structures* → *Define Operating Concern* → *Maintain Value Fields*.
 - b) On the *Edit Value Fields: Start* screen, select the *All value fields* radio button and choose the *Display* pushbutton.
 - c) On the *Display Value Fields: Overview* screen, select the *Description* column and choose  (*Sort Ascending*).
 - d) The list of *Value Fields* is displayed in ascending order and you will find that *Customer Discount*, *Number of Employees*, *Price reduction*, *Revenue*, and *Variable Prod. Costs* are all *Value Fields*.



Note:

You may notice that some value fields have more than one value in the Field Catalog. For example, for *Revenue* there are two value fields, *VV010* and *ERLOS*. One is delivered by SAP (*ERLOS*) and the other is custom created (*VV010*).

7. What are the aggregation settings for the *Number of Employees* value field?
Why would you decide to use this field?
- a) On the *Display Value Fields: Overview* screen, select the row with the *VV495* value in *Value Field* column and the *Number of employees* value in the *Description* column.
 - b) Choose  (*Details*).
 - c) On the *Display Val. fld VV495* screen, check that the *LAS Last value* is displayed in the *Agg. (time)* field.
Period values are normally added together in the Information System and in CO-PA planning. This means the aggregation rule is SUM. The aggregation rules, last value and average are useful only for representing statistical, noncumulative values in value fields, when the most recent or average value is required instead of the SUM.
 - d) Run transaction code */N* to return to the *SAP Easy Access* screen.



Evaluate the Attributes, Characteristics, and Value Fields of an Operating Concern

Business Example

You need reports in both the group and company currency because your company conducts business in foreign countries. Your sales manager and product manager have asked you about the specific data fields that you require for reporting.

Determine the attributes of the operating concern and add characteristics and value fields to it.

Task 1

Display the attributes of the operating concern.

1. You have decided to use both company code and operating concern currencies in costing-based CO-PA. Display the currency settings for the operating concern, IDEA. What settings are configured?
2. What is the fiscal year variant for IDEA?

Task 2

Check the data structures for the operating concern.

Your sales manager has asked you to check which, if any, of the following characteristics are active for the operating concern: *Material Group*, *Customer*, and *Industry*.

1. Which of these characteristics are selected for the operating concern?
2. Your product manager has requested that the following value fields be included in your reporting, and therefore you want to see if they are configured in the operating concern: *Ordered Quantity*, *Scrap*, *Annual Rebates*, and *Marketing Activities*.

Task 3

Check characteristics of profitability segments.

1. Are Profitability Segments created in the IDEA operating concern for the sales order or sales order item characteristics?
2. When data is posted into the operating concern IDEA for three different products within the same material group, how many data records are posted in costing-based CO-PA? How many are posted in account-based CO-PA?

Task 4

Check the status of the operating concern.

1. What is the status of the operating concern IDEA? Why is this information important?



Evaluate the Attributes, Characteristics, and Value Fields of an Operating Concern

Business Example

You need reports in both the group and company currency because your company conducts business in foreign countries. Your sales manager and product manager have asked you about the specific data fields that you require for reporting.

Determine the attributes of the operating concern and add characteristics and value fields to it.

Task 1

Display the attributes of the operating concern.

1. You have decided to use both company code and operating concern currencies in costing-based CO-PA. Display the currency settings for the operating concern, IDEA. What settings are configured?
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Structures* → *Define Operating Concern* → *Maintain Operating Concern*.
 - b) On the *Maintain Operating Concern* screen, enter **IDEA** in the *Operating Concern* field and choose the *Attributes* tab page.
 - c) On the *Attributes* tab page, check the following data:

Field Name or Data Type	Value
<i>Operating concern currency</i>	EUR
<i>Company Code Currency</i>	Selected
<i>OpConcern crcy,PrCtr valuation</i>	Selected
<i>Comp.Codecrncy,PrCtrvaluation</i>	Selected

2. What is the fiscal year variant for IDEA?
 - a) On the *Attributes* tab page, check that the *K4* value is in the *Fiscal year variant* field, which represents a calendar year + 4 special periods.

Task 2

Check the data structures for the operating concern.

Your sales manager has asked you to check which, if any, of the following characteristics are active for the operating concern: *Material Group*, *Customer*, and *Industry*.

1. Which of these characteristics are selected for the operating concern?

- a) On the *Maintain Operating Concern* screen, choose the *Data Structure* tab page and then choose the *Display* pushbutton.



Note:

Although you entered the Customizing activity *Maintain Operating Concern*, the system brings you into the *Display* mode. This is to protect the *Operating Concern* configuration. If you change the operating concern, you would choose the *Display/Change* pushbutton to go into the *Change* mode. Because we are just displaying the configuration, this is not necessary.

- b) On the *Display Data Structure: Characteristics* screen, choose the *Chars* tab page and check that the *Material Group* and *Industry* code are displayed.
- c) Choose *Extras* → *Display fixed fields*.
- d) In the *Fixed Fields* dialog box, check that the *Customer* value is in the *Description* field, which is a fixed field.
- e) Choose *Continue*.
2. Your product manager has requested that the following value fields be included in your reporting, and therefore you want to see if they are configured in the operating concern: *Ordered Quantity*, *Scrap*, *Annual Rebates*, and *Marketing Activities*.
- a) On the *Display Data Structure: Characteristics* screen, choose the *Value fields* tab page.
- b) On the *Value fields* tab page, check that the *Ordered Quantity*, *Scrap*, and *Marketing Activities* value fields are included in the *Operating Concern* configuration. The *Annual Rebates* may be calculated in your report using the *Quantity*, *Customer*, *Material discounts* as well as the *Other rebates* value fields.
- c) Return to the Customizing screen.

Task 3

Check characteristics of profitability segments.

1. Are Profitability Segments created in the IDEA operating concern for the sales order or sales order item characteristics?
- a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Structures* → *Define Profitability Segment Characteristics (Segment-Lvl Characteristics)*.
- b) On the *Change View "Profitability Segment Characteristics": Overview* screen, check that the radio buttons in the *Not Used* field for the values *Sales Order* and *Sales Ord. Item* are selected.
- Selecting the radio buttons *Sales Order* and *Sales Ord. Item* in the *Not Used* field does not mean that the data cannot be evaluated according to these characteristics. The line item reports and the profitability report based on line items are available for this.
2. When data is posted into the operating concern IDEA for three different products within the same material group, how many data records are posted in costing-based CO-PA? How many are posted in account-based CO-PA?

- a) On the *Change View "Profitability Segment Characteristics": Overview* screen, check that the radio button is selected for the product value in the *Costing-Based* field. Therefore, the system creates the following postings:
- In costing-based CO-PA, one Profitability Segment per product
 - In account-based CO-PA, one Profitability Segment for all three products



Hint:

If you view the characteristic *Material Group (MATKL)*, you will find it is a *Segment-level* characteristic for *Cost Based+Acct Based*. Therefore, if the products were from different *Material Groups*, then different *Profitability Segments* would be used. However, in our example, we said that it was the same material group and therefore only one Profitability Segment in account-based CO-PA is used.

- b) Return to the *CO-PA IMG* screen.

Task 4

Check the status of the operating concern.

1. What is the status of the operating concern IDEA? Why is this information important?
 - a) In Customizing, choose *Controlling → Profitability Analysis → Structures → Define Operating Concern → Maintain Operating Concern*.
 - b) On the *Maintain Operating Concern* screen, choose the *Environment* tab page and check that both *Cross-client part* and *Client-specific part* are active.

This means that the environment of the operating concern has been generated, all data tables are active, and attributes created. If any of the steps (Save, Activate, or Generate) have been left out, no postings can be made to the tables of the operating concern. This would result in an error in any data transaction that affects the operating concern.
 - c) Enter the transaction code */N* to return to the *SAP Easy Access* screen.



LESSON SUMMARY

You should now be able to:

- Define data structures



Learning Assessment

1. Which of the following are basic concepts of costing-based Profitability Analysis (CO-PA)?

Choose the correct answers.

- A Characteristics
- B Internal responsibility
- C Profitability segments
- D Controlling area currency
- E Value fields

2. In costing-based Profitability Analysis (CO-PA), the actual data is always updated in the operating concern currency. You can change the _____ as long as no data has been posted in the operating concern.

Choose the correct answer.

- A Operating concern currency
- B Company code currency
- C Profit center valuation
- D Fiscal year variant

3. Which of the following tables enable you to access the line item data and the information through line item display features?

Choose the correct answers.

- A CE1XXXX
- B CE2XXXX
- C CE3XXXX
- D CE4XXXX



Learning Assessment - Answers

1. Which of the following are basic concepts of costing-based Profitability Analysis (CO-PA)?

Choose the correct answers.

- A Characteristics
- B Internal responsibility
- C Profitability segments
- D Controlling area currency
- E Value fields

2. In costing-based Profitability Analysis (CO-PA), the actual data is always updated in the operating concern currency. You can change the _____ as long as no data has been posted in the operating concern.

Choose the correct answer.

- A Operating concern currency
- B Company code currency
- C Profit center valuation
- D Fiscal year variant

3. Which of the following tables enable you to access the line item data and the information through line item display features?

Choose the correct answers.

- A CE1XXXX
- B CE2XXXX
- C CE3XXXX
- D CE4XXXX

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UNIT OBJECTIVES

- Describe the concepts of characteristic derivation and valuation
- Define a derivation strategy
- Configure a valuation strategy
- Evaluate the configuration of a valuation strategy with a costing sheet



Describing the Concepts of Characteristic Derivation and Valuation

LESSON OVERVIEW

This lesson explains the concepts of characteristic derivation and valuation.

Business Example

Mr. Udo, Ms. Veloce, and Ms. Schnell require profitability reports for many characteristics. Some of these characteristics (such as sales organization, sold to, product, and so on) are available on the selling and invoicing transactions, while others (such as product group, state, and so on) are available only on master records.

Mr. Udo requests that, for sales reports, the state and country be first determined from the goods recipient (if there is one for the CO-PA relevant transaction). If not, they are to be derived from the sold-to party. Ms. Veloce is familiar with the customer hierarchy defined in sales order management and insists on being able to report along the lines of that hierarchy even in CO-PA. In addition, she requires profitability reports on the special characteristic "strategic business unit", which is only determined through the product group.

This special categorization of product groups is only used within CO-PA. The true freight costs are not known at the time of invoicing and are known only at the period-end, when the invoices have been received from the freight vendors. These costs are not applied in a costing-based approach in Financial Accounting (FI) but are calculated in CO-PA. As a result, Ms. Schnell is able to estimate the expected result for her plant before the month's end.

Mr. Cash, who is responsible for company planning, requests that sales quantities be planned with reference to the material requirements in CO-PA. For sales quantities to be planned with material requirements, the system should read the price and cost information and automatically apply that information to the planned quantities, so that the respective revenue, cost of sales, and profit can be determined accurately. The product costing module is currently being used and the detailed results need to be imported into CO-PA. Importing these results helps analyze the true cost of sales and analyze and calculate the types of margins, such as the margin after fixed costs and the margin after all costs.

For this reason, you require the following knowledge:

- An understanding of the concepts of derivation
- An understanding of the concepts of valuation



Characteristic derivation can be used to determine the value of one characteristic based on the value of another characteristic, if there is a logical dependency between the two. It is important for the participant to realize that the system creates many derivation steps automatically during generation. Explain the scenarios in which the users must define their own derivation steps and what the systems offers to help them with this.

Valuation can only be used in the costing-based approach for both the planning and the actual values. Valuation is also used to read cost estimates for materials; as a result, the cost

component split for the cost of goods manufactured is retained. This cost component split for the cost of goods manufactured is the only way to separately display fixed and variable manufacturing costs. Contribution margin accounting according to full and partial costs can be realized.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Describe the concepts of characteristic derivation and valuation

Characteristic Derivation



Some key points about derivation are as follows:



- Derivation supplements or overwrites specific automatically mapped characteristic values.
- A derivation strategy is a sequence of steps, where each step uses one derivation technique to calculate one or more values for one or more corresponding characteristics.
- Control attributes, such as conditions for execution, reactions when unsuccessful, and overwriting authority, can be assigned to each derivation step.
- The system creates some derivation steps at generation time. It is possible to modify some of these steps. You could create your own derivation steps too.

Valuation



Some key points about valuation are as follows:



- Valuation supplements the data being passed directly from transactions into CO-PA with calculated, retrieved, or accessed values.
- A valuation strategy can contain CO-PA costing sheets, sales order management pricing procedures (in planning), product costing calls, and user exit calls in a sequence that is customizable.
- Valuation strategies must be assigned to record types, points of valuation, and plan versions when the plan version needs to be activated.
- Using valuation is optional. It is simply a tool that can be used to retrieve detailed information from CO-PA.

Characteristic Derivation and Valuation (an Example)

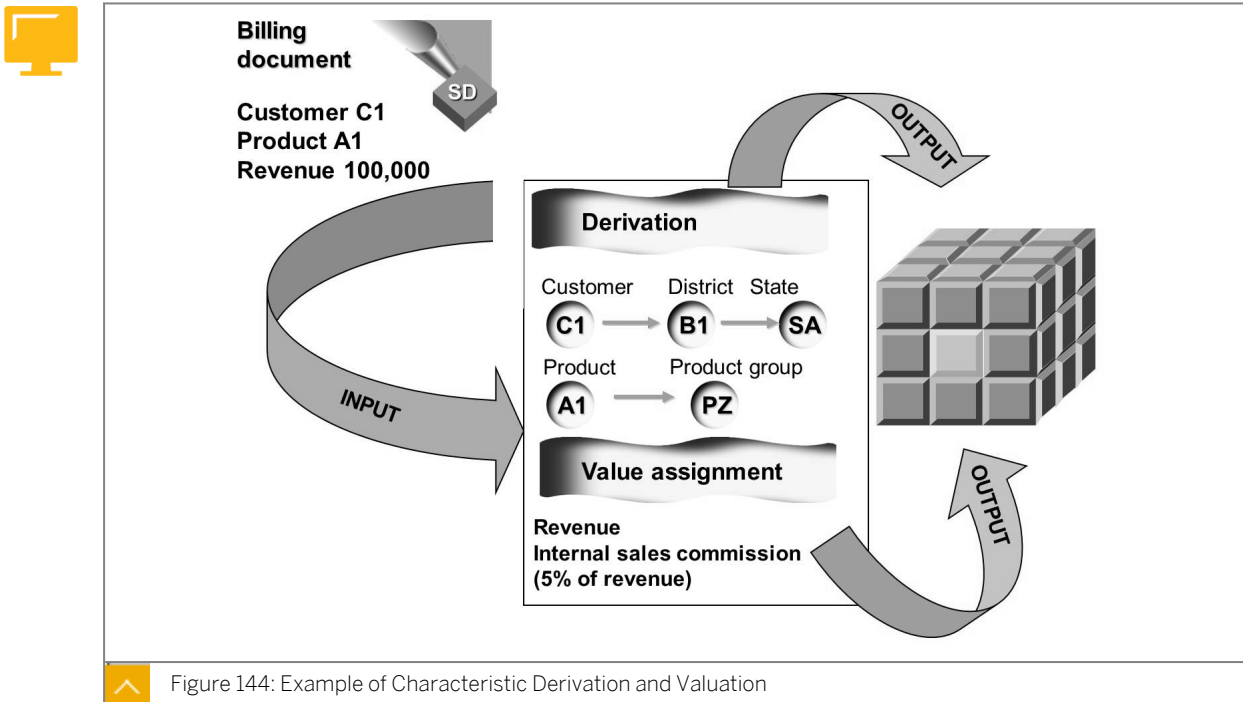


Figure 144: Example of Characteristic Derivation and Valuation

Each activity relevant to CO-PA in the SAP system (for example, billing) creates line items. The data created in CO-PA is defined by automatic and manual assignments as well as the configuration of the characteristic derivation and valuation.

For each sales order management transaction, the system automatically imports the sales organization, distribution channel, division, customer, product, profit center, business area, and any sales order management partners for each sales order or invoice item. The values of all of the fields, except customer and product, can be overwritten with derivation.

In addition to the values that the system determines through automatic mappings, derivation can access additional information, such as characteristic values, both on and off the originating transaction. For example, derivation can retrieve the sales district from the invoice and the product group from the material master.

In addition to the values imported through the manual mappings, valuation can also import information that is off the originating transaction. For example, it can retrieve in-depth product cost breakdown information from product costing, which is not available on the sales document.

All transactions relevant to CO-PA are affected by derivation configuration, and some of the transactions are potentially affected by valuation configuration, which is optional.



FACILITATED DISCUSSION

Outline the use of characteristic derivation and valuation.



LESSON SUMMARY

You should now be able to:

- Describe the concepts of characteristic derivation and valuation



Defining a Derivation Strategy

LESSON OVERVIEW

This lesson explains the derivation strategy. In addition, it explains how to evaluate derivation techniques.

Business Example

Mr. Udo, Ms. Veloce, and Ms. Schnell require profitability reports for many characteristics. Some of these characteristics (such as sales organization, sold to, product, and so on) are available on the selling and invoicing transactions, while others (such as product group, state, and so on) are available only on master records. Mr. Udo requests that, for sales reports, the state and country be first determined from the goods recipient (if there is one for the CO-PA relevant transaction). If not, they are to be derived from the sold-to party.

Ms. Veloce is familiar with the customer hierarchy defined in sales order management and insists on being able to report along the lines of that hierarchy, even in CO-PA. In addition, she requires profitability reports on the special characteristic strategic business unit, which is only determined through the product group. This special categorization of product groups only has meaning within CO-PA.

As a result, for reporting, sales organization, distribution channel, division, sold-to, ship-to, and product, the following information is required from each order and invoice item:

- Product group and product hierarchy information from the material master record
- Country and state from either the ship-to record or the sold-to record
- Customer hierarchy information for each business transaction (or simply transaction) involving a customer

You also need to categorize product groups into special categories called strategic business units for reporting. For this reason, you require the following knowledge:

- An understanding of derivation techniques
- How to evaluate the derivation configuration



Establish that the system automatically generates a derivation strategy when the operating concern is generated. Describe the standard derivation steps. Show the options available to users for adding derivation steps. Emphasize that for user-defined characteristics, derivations steps need to be added to the derivation strategy.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Define a derivation strategy

Characteristic Derivation



At this point, check the participants' understanding of the following points:

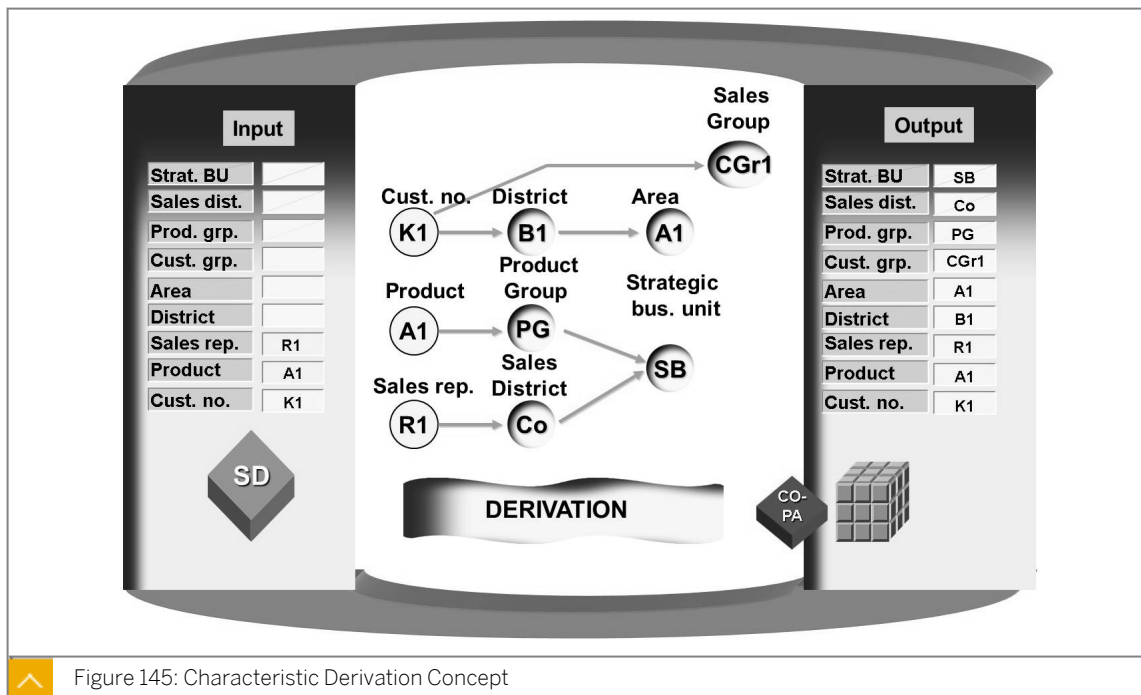
- What characteristics can the system read from one simple sales order?

The possible answers are as follows:

- Product
- Customer
- Sales organization

- Where does the system find values such as the customer group and the product group?

In addition, explain the concept of check tables at this point. Highlight the fact that most check tables are maintained in other applications but the check tables for user-defined characteristics need to be maintained by someone with access to the CO-PA configuration. Also point out that the system attempts to derive all characteristic values.



For each CO-PA relevant transaction, if the derivation strategy is complete, the system attempts to derive a characteristic value for each characteristic in the operating concern. Notice that derivation is not always successful. If the system cannot determine a characteristic value for a characteristic, it posts a blank, null, or unassigned characteristic value.

The definition of the profitability segment consists of the total combination of (segment-level) characteristic values for a given transaction. The profitability segment is the account assignment object for CO-PA.



How to Display Check Tables

1. Show the check table for *Sales District*.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Master Data* → *Characteristic Values* → *Display Characteristic Values*.
 - b) Choose the *All Characteristics On/Off* pushbutton and the *Technical Names On/Off* pushbutton.
 - c) On the *Display Characteristics Values* screen, expand the *referenced characteristics* tree view and then choose the *Sales district (BZIRK)* node. You are taken to the Customizing screen to define sales districts. Explain the integration and then return to the *Display Characteristic Values* screen.
 - d) Demonstrate a user-defined characteristic and contrast this characteristic with *Sales District*. On the *Display Characteristics Values* screen, expand the *user-defined characteristics* tree view and choose the *Regional Manager (WWMGR)* node. Show how *Regional Manager* is unique to CO-PA and, therefore, would be maintained by the CO-PA team. Return to the *SAP Easy Access* screen.
 - e) Maintain the check table for characteristic *WWMGR*. To do so, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Master Data* → *Characteristic Values* → *Change Characteristics Values (KES1)*.
 - f) Choose the *New Entries* pushbutton, and enter the following data:

Regional Manager	Description
001	Miller
002	Jones
003	Smith

- g) Save your entries, and return to the *SAP Easy Access* screen.
 Emphasize that so far you have not instructed the system of the circumstances under which it can consider Miller, Jones, or Smith as the Regional Manager.



How to Create a Line Item in CO-PA to Show Derivation



Demonstrate the steps listed in Task 1 and 2 of Evaluate the Derivation Configuration exercise.

Derivation Techniques

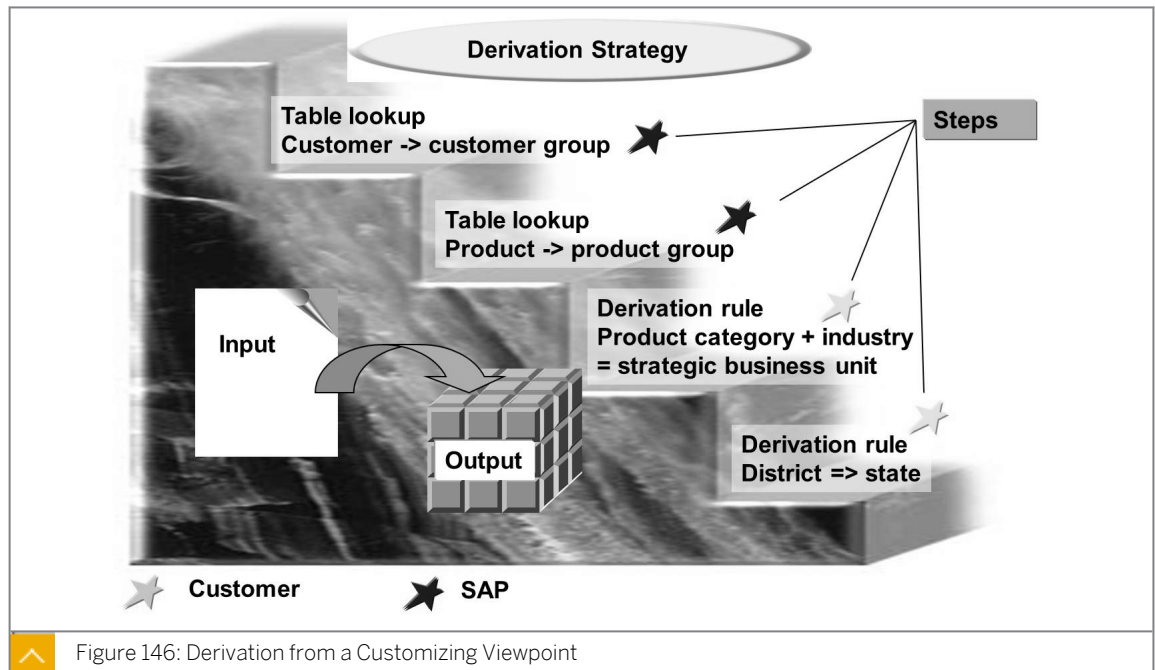


Figure 146: Derivation from a Customizing Viewpoint

A derivation strategy consists of a number of different steps, which derive different characteristic values. Each derivation step defines the logical interrelationship between known source characteristics and the characteristics to be derived.

The system automatically creates a standard derivation strategy for each operating concern. This strategy contains derivation steps for all dependencies between characteristics that are already known. You can modify this strategy to meet the requirements of your company. If you define your own characteristics that need to be derived from other characteristics, add your own derivation steps to the standard strategy to define the derivation.

Options for Derivation Steps

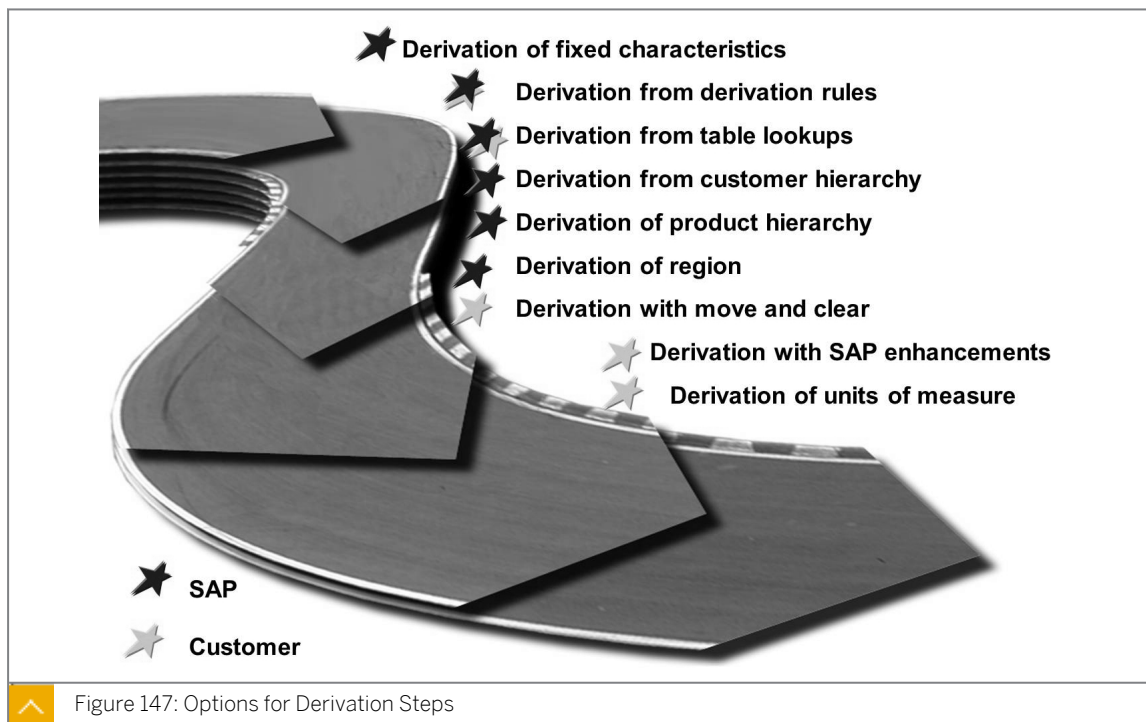


Figure 147: Options for Derivation Steps

The system goes through a sequence of steps when attempting to locate a characteristic value for each characteristic for transactions relevant to CO-PA. This sequence of steps is known as the derivation strategy.

The system performs the steps in a customizable sequence to maximize the possibilities of locating or determining valid characteristic values.

The following instructions can be configured for each step:

- Conditions under which the step should be executed
- Whether initial values are allowed for the source fields in a step
- Whether the step should overwrite an existing characteristic value
- Whether an error message should generate if the step is unsuccessful

Each step represents one of the customizable derivation techniques, such as Table lookups, derivation rules, regions, product hierarchies, customer hierarchies, moves, clears, and enhancements. The values of one or more characteristics can be determined in a single step.

Derivation occurs for all transactions relevant to CO-PA, including direct entry into CO-PA and external data uploads into CO-PA.

Standard Derivation of Organizational Units

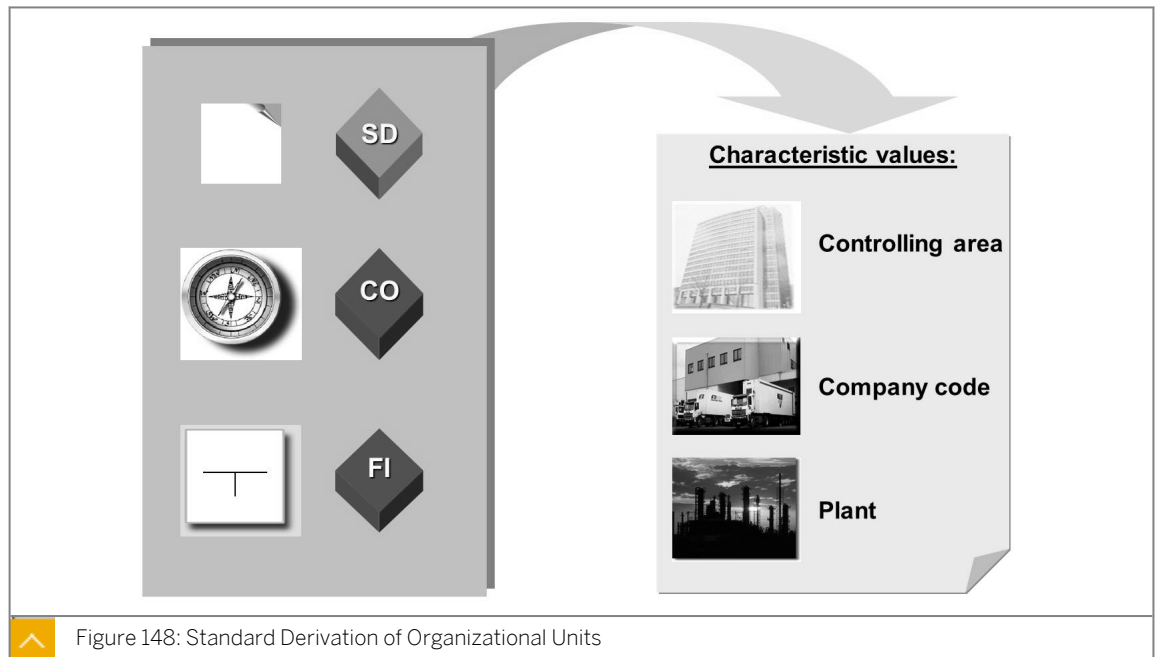


Figure 148: Standard Derivation of Organizational Units

Characteristics such as division and profit center have fixed derivation steps. This means that the system automatically generates non-modifiable steps that may be used to determine their values. These steps may be in the form of a standard derivation technique or Function call.

You can use other derivation steps to overwrite the values determined through fixed derivation steps. This overwriting of values can be achieved with all characteristics, except controlling area, company code, product, and customer. These characteristics have fixed and non-modifiable derivation.

The system incorporates fixed derivation to ensure that many organizational elements are populated. This will enhance the possibility of reconciliation with other data modules in the SAP system.

Derivation Through Table Lookup

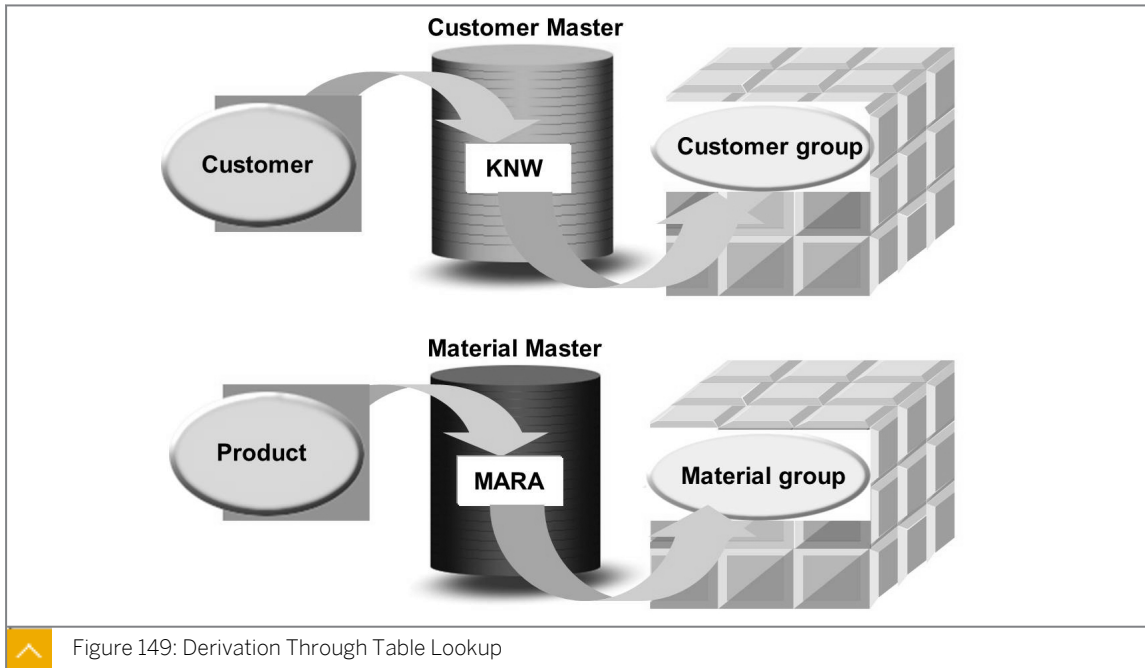


Figure 149: Derivation Through Table Lookup

A Table lookup is a derivation method that CO-PA uses to access the characteristic values from SAP master data tables when this information is not available in the originating transaction. For example, an invoice might not contain the purchasing group for a material being sold. CO-PA can capture this information for the invoice item using a Table lookup.

Table lookups can be performed when the key of the table to be accessed can be filled with the characteristic values that are already known to CO-PA for the transaction. For example, a country value can be determined when the customer identity is known because the customer is the only key to the KNA1 table, which contains general customer information, such as addresses.

The ability to customize Table lookup derivation allows you, as the configurator, to control the types of characteristic values that are used to access other characteristic values. For example, you can configure the Table lookup for the characteristic country to find the country value for the *ship-to* field instead of the country value for the *sold-to* field.

Using Table lookups, you can access entire or parts of field values for the fields in the tables in which keys can be filled with the known characteristic values of transactions. For example, you can configure the derivation lookup for the product hierarchy to import the entire product hierarchy value or only the first several characters of the hierarchy into CO-PA.

The SAP system generates some Table lookups automatically based on the definition of a characteristic. The SAP system generates these Table lookups when the operating concern environment is generated. You can modify the nonfixed lookups. Other table lookups, such as those for user-defined characteristics, must be created from the beginning.

Derivation Rule

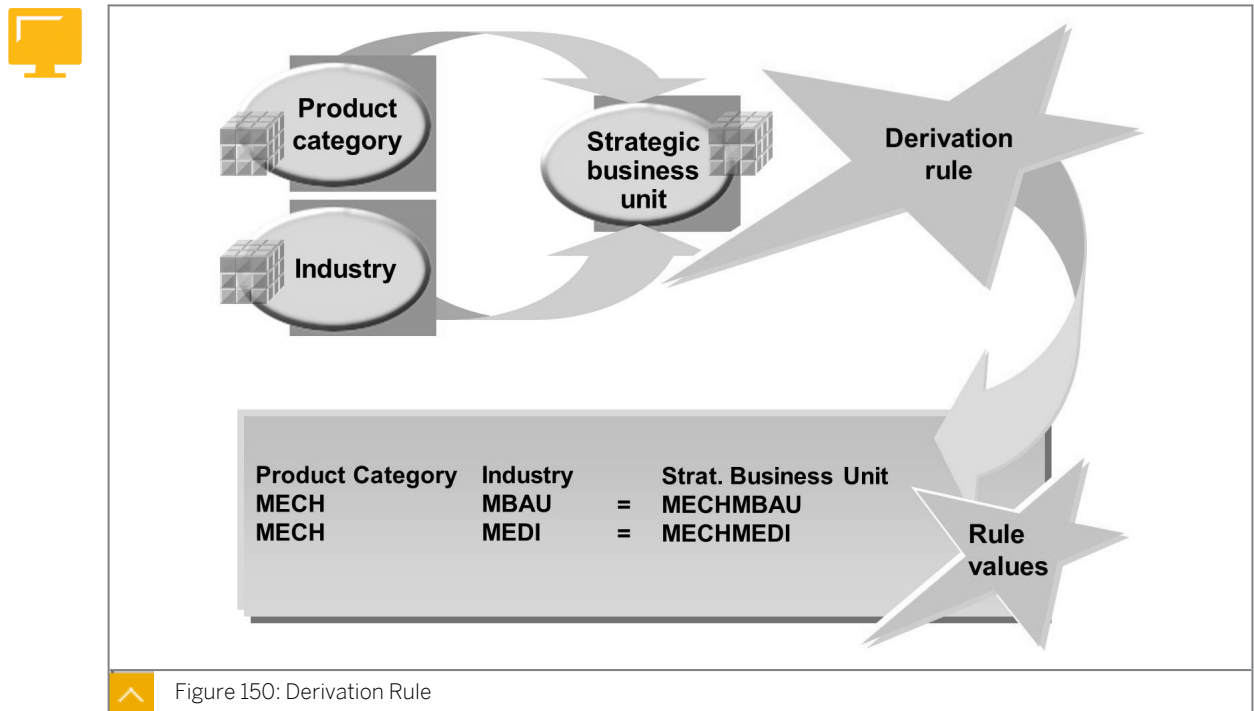


Figure 150: Derivation Rule

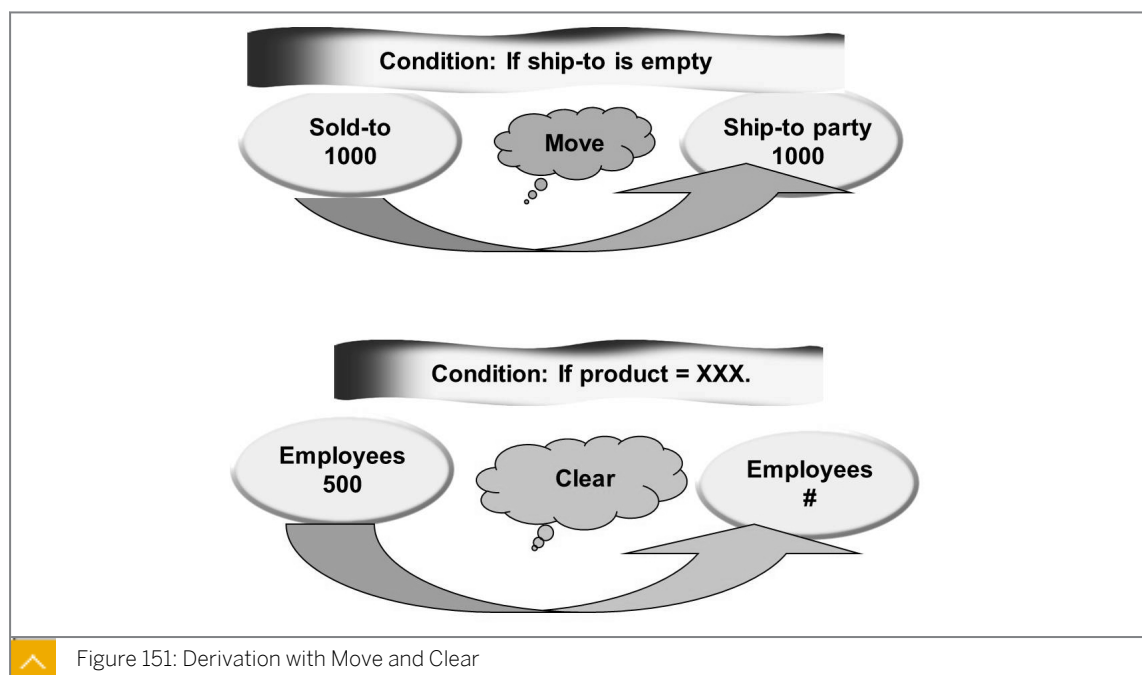
Derivation rules are used to determine characteristic values through user-defined logic. They are frequently used with user-defined characteristics although their use is not limited to user-defined characteristics alone.

With derivation rules, characteristic values, known as target values, are directly determined based on the values of other characteristic values, known as source values.

Similar to other derivation steps, you can configure derivation rules either to apply to all situations or to only apply when certain conditions are met, for example, only for sales organization 1000. You can also configure derivation rules to produce an error message when a characteristic value cannot be determined using the rule entries. You can also ignore the error and proceed.

In contrast to other derivation steps, you can configure derivation rule entries to be either related to a specific interval or time (time-dependent) or applicable at all times (time-independent). Derivation rules can be set up in sequence with other derivation steps and methods to produce complex derivation logic.

Derivation with Move and Clear



With a move, you can directly transfer a characteristic value or part of the characteristic value to another characteristic. Under specific conditions, you can also move a constant to a characteristic.

In the figure, the value in the *Sold-to* field is copied to the *Ship-to* field with the *Move* function, if the *Ship-to* field is originally not populated by any previous derivation step. When specific conditions arise, the *Clear* function is available to clear a value from a characteristic. In addition, the employee value is cleared to *not assigned* when the product is a specific value because the employees should not get sales credit for certain items.

The system automatically generates a move derivation step to move the dummy profit center value from EC-PCA to CO-PA, if other steps cannot determine a profit center.

Customizing Monitor – Derivation Analysis



The screenshot shows the SAP 'Characteristic Derivation: Overview' window. It contains a table with columns: Ste., Target field, Source field1, Source field2, Source field3, Source field4, Source field5, Source field6, Method, Parameters, User-..., Cond..., and Over... The table lists several derivation steps, including 'Derivation rule k9BID38000...', 'Customer hi...', 'Move', and 'Table lookup k9NA1'. Below the table, the 'Step 4 Move' configuration is shown, including a table for 'Only Execute if All Conditions Listed Below Are Met' with columns: Origin, Name, Det., Name, O., Value, and Description. The table shows a condition for 'CO-PA' with 'Name' 'KUNWE' and 'Det.' 'Ship-To Party', with 'O.' '=' and 'Value' 'Not assigned'. There are also checkboxes for 'User-Defined Step' and 'Issue error message if no value found'.

Figure 152: Customizing Monitor – Derivation Analysis

The Customizing Monitor provides an overview of all derivation steps. Additional functions are available when you use the SAP list viewer to display the derivation analysis. You can search for specific value fields and determine their use in derivation.



How to Evaluate the Configuration of a Table Lookup



Demonstrate the steps listed in Task 2 of Evaluate the Derivation Configuration exercise.



How to Evaluate the Configuration of a Derivation Rule



Demonstrate the steps listed in Task 2 of Evaluate the Derivation Configuration exercise.



How to Perform a Derivation with a Move



Demonstrate the steps listed in Task 2 of Evaluate the Derivation Configuration exercise.

Unit 9

Exercise 16



Evaluate the Derivation Configuration

Business Example

The system requires country and region information from either the ship-to party (if there is one) or the sold-to party.

Product groups are to be categorized into strategic business units for reporting.

Your sales manager requires reports for the customer group and sales district and would like to know whether the values for these fields can be read directly from the customer master and sales document tables.



Note:

The term characteristic value refers to an actual individual value defined for a particular characteristic. All data transferred to CO-PA is checked against the valid characteristic values, which are stored in check tables. These check tables can either already exist in the original component of the characteristic or can be maintained manually in CO-PA. The characteristic derivation describes the determination of characteristic values for each business transaction that is relevant for CO-PA.

Evaluate the derivation techniques and view the sequence to obtain characteristic values from the desired sources for all CO-PA-relevant transactions.

Task 1

1. In the CO-PA application menu, display the check tables for *Sales District* and *Strategic Business Unit* and find two valid values for each characteristic.

Task 2

Display the derivation strategy in the Customizing settings of CO-PA. Why can some derivation steps be modified and others cannot?

1. Display the derivation strategy table in the Customizing settings of CO-PA. The first screen only shows user-defined derivation steps. You can expand the display to view all derivation steps, including predefined derivation steps.
2. Display the derivation rule for the *Strategic Business Unit* characteristic.
What are the source fields?
In which application do the source fields originate?
3. Because *Strategic Business Unit* is a user-defined field in CO-PA, rule values have been defined to determine the valid characteristic value of this field. Display the following rules:

4. Display the Table lookup for the *Customer classification from customer* characteristic.
What is the table of origin for this characteristic?
Why are there no rule values for this characteristic?
5. Display the MOVE step for the *Ship-to party* characteristic.
What are the source and target fields?
An attribute has been maintained for this characteristic, to apply the derivation rule only under specific conditions. What is the attribute for this derivation step?
What is the purpose of this particular step?



Evaluate the Derivation Configuration

Business Example

The system requires country and region information from either the ship-to party (if there is one) or the sold-to party.

Product groups are to be categorized into strategic business units for reporting.

Your sales manager requires reports for the customer group and sales district and would like to know whether the values for these fields can be read directly from the customer master and sales document tables.



Note:

The term characteristic value refers to an actual individual value defined for a particular characteristic. All data transferred to CO-PA is checked against the valid characteristic values, which are stored in check tables. These check tables can either already exist in the original component of the characteristic or can be maintained manually in CO-PA. The characteristic derivation describes the determination of characteristic values for each business transaction that is relevant for CO-PA.

Evaluate the derivation techniques and view the sequence to obtain characteristic values from the desired sources for all CO-PA-relevant transactions.

Task 1


1. In the CO-PA application menu, display the check tables for *Sales District* and *Strategic Business Unit* and find two valid values for each characteristic.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Master Data* → *Characteristics Values* → *Display Characteristics Values*.
 - b) If prompted to enter the operating concern, enter **IDEA** in the *Operating Concern* field and choose *Continue*.
 - c) On the *Display Characteristics Values* screen, choose the *All Characteristics On/Off* pushbutton and then select *reference characteristics* → *Sales District*.
 - d) In *Customizing*, choose *Sales* → *Define Sales Districts*.
 - e) On the *Change View "Customers: Sales Districts": Overview* screen, view some of the following sales districts:

Sales District	District Name
000001	Northern Region
000002	Southern Region

Sales District	District Name
000003	Western Region
000004	Eastern Region

- f) Choose *Back* two times to return to the *Display Characteristics Values* screen.
- g) On the *Display Characteristics Values* screen, choose *user-defined characteristics* → *Strategic Bus. Unit*.
The table is displayed because it is a user-defined characteristic.
- h) On the *Display View "Table of Characteristics Derivation": Overview* screen, view some of the following strategic business units:

Start. Business Unit	Name
CHEMAGRA	Agric. Chemicals
CHEMCHEM	Chemicals
CHEMFOOD	Food chemicals
COMPINDU	Industrial computers

- i) Choose  (*Back*) two times to return to the *SAP Easy Access* screen.



Task 2


Display the derivation strategy in the Customizing settings of CO-PA. Why can some derivation steps be modified and others cannot?

- Display the derivation strategy table in the Customizing settings of CO-PA. The first screen only shows user-defined derivation steps. You can expand the display to view all derivation steps, including predefined derivation steps.
 - In Customizing, choose *Controlling* → *Profitability Analysis* → *Master Data* → *Define Characteristics Derivation*.
 - On the *Characteristics Derivation: Display Strategy* screen, choose *View* → *Display All Steps*.
You now see all derivation steps, not just the user-defined steps.
 - View *Derivation Strategy*. The steps with the *Pencil* pushbutton under the *Modifiable* field can be modified. The others cannot be modified.
Nearly all fixed characteristics have programmed derivation steps that cannot be changed for technical reasons, for example, the derivation of the company code from the sales organization.
- Display the derivation rule for the *Strategic Business Unit* characteristic.
What are the source fields?
In which application do the source fields originate?
 - Select the row with the *Prod.Cat. + Industry* → *SBU* value in the *Description* field and choose the *Details* pushbutton.

- b) On the *Characteristics Derivation: Display Rule Definition* screen, choose the *Definition* tab and view the *Source* fields – *WWPRC (Product Category)* and *BRSCH (Industry Key)* – and the field being derived – the *Target* field: *WWSBU (Strategic Bus. Unit)*. Check that the *Origin* of all these values is *CO-PA*.
3. Because *Strategic Business Unit* is a user-defined field in *CO-PA*, rule values have been defined to determine the valid characteristic value of this field. Display the following rules:
- a) On the *Characteristics Derivation: Display Rule Definition* screen, choose the *Maintain Rule Values* pushbutton.
- b) On the *Characteristics Derivation: Display Rule Values* screen, check the following data:

Field Name or Data Type	Value
<i>Product Category</i>	<i>CHEM</i>
<i>Industry Key</i>	<i>TRAD</i>
<i>Strategic Bus.Unit</i>	<i>CHEMCHEM</i>

- c) Choose  (*Back*) to return to the *Characteristics Derivation: Display Strategy* screen.
4. Display the Table lookup for the *Customer classification from customer* characteristic. What is the table of origin for this characteristic?
Why are there no rule values for this characteristic?
- a) On the *Characteristics Derivation: Display Strategy* screen, double-click the row with the value *Table lookup* in the *Step Type* field and the value *Customer classification from customer* in the *Description* field.
- b) On the *Characteristic Derivation Display Table Lookup* screen, choose the *Definition* tab page. Under the *Source Fields for Table Lookup* pane, check that the *KUNNR* value is in the *Field Name* field and the *KNA1* value is in the *Origin* field. The *KNA1* table is the *Customer Master Data General* data table. Consequently, *CO-PA* does not require a special derivation rule table, as was necessary with the *Strategic Business Unit* characteristic.
- c) Choose  (*Back*) to return to the *Characteristics Derivation: Display Strategy* screen.
5. Display the *MOVE* step for the *Ship-to party* characteristic.
What are the source and target fields?
An attribute has been maintained for this characteristic, to apply the derivation rule only under specific conditions. What is the attribute for this derivation step?
What is the purpose of this particular step?
- a) On the *Characteristics Derivation: Display Strategy* screen, double-click the row with the value *Move* in the *Step Type* field and *Ship-to party* in the *Description* field.
- b) On the *Characteristic Derivation: Display Assignment* screen, choose the *Definition* tab page and check that the *KNDNR (Customer)* value is in the *Source* field and the *KUNWE (Ship-to party)* value is in the *Target* field.
- c) Choose the *Condition* tab. Verify a condition that has been defined to perform this *Move* if the *Ship-to party* is not assigned or blank.
This step moves *Customer* to *Ship-to party*, but only if *Ship-to party* is blank.

- d) Choose  (*Back*) to return to the Customizing screen.

Unit 9

Exercise 17



Create a Line Item That Uses Derivation

Business Example

Your sales manager requires reports for the customer group and sales district and would like to know whether the values for these fields can be read directly from the customer master and sales document tables. For this purpose, test and analyze the derivation strategy settings.

Enter a line item for your sample customer to test the derivation strategy.

1. To test the derivation strategy, enter a line item for your sample customer and the product **P-100** directly in costing-based CO-PA. Select *Derivation* to execute. As you can see, some of the fields are blank. Use the derivation analysis to view the various derivation steps.

Field Name or Data Type	Value
<i>Posting Date</i>	Today's date
<i>Record Type</i>	F
<i>Point of valuation</i>	01
<i>Legal view</i>	Select
<i>Customer</i>	T-CO05A##
<i>Product</i>	P-100
<i>Plant</i>	1000
<i>Sales Org.</i>	1000
<i>Distribution Channel</i>	10
<i>Company Code</i>	1000

2. Determine why *ORDER REASON* was not derived.
3. Check how the system determined the sales office field.



Create a Line Item That Uses Derivation

Business Example

Your sales manager requires reports for the customer group and sales district and would like to know whether the values for these fields can be read directly from the customer master and sales document tables. For this purpose, test and analyze the derivation strategy settings.

Enter a line item for your sample customer to test the derivation strategy.

- To test the derivation strategy, enter a line item for your sample customer and the product **P-100** directly in costing-based CO-PA. Select *Derivation* to execute. As you can see, some of the fields are blank. Use the derivation analysis to view the various derivation steps.

Field Name or Data Type	Value
<i>Posting Date</i>	Today's date
<i>Record Type</i>	F
<i>Point of valuation</i>	01
<i>Legal view</i>	Select
<i>Customer</i>	T-CO05A##
<i>Product</i>	P-100
<i>Plant</i>	1000
<i>Sales Org.</i>	1000
<i>Distribution Channel</i>	10
<i>Company Code</i>	1000

- In Customizing, choose *Controlling* → *Profitability Analysis* → *Tools* → *Analysis* → *Valuation Simulation*.
- On the *Valuation Simulation CO-PA: Initial* screen, enter the following data and choose *Enter*.

Field Name or Data Type	Value
<i>Posting date</i>	Today's date
<i>Record Type</i>	F
<i>Point of valuation</i>	01

Field Name or Data Type	Value
<i>Legal View</i>	Select

- c) On the *Valuation Simulation CO-PA* screen, enter the following data:

Field Name or Data Type	Value
<i>Customer</i>	T-CO05A##
<i>Product</i>	P-100
<i>Plant</i>	1000
<i>Sales Org.</i>	1000
<i>Distribution Channel</i>	10
<i>Company Code</i>	1000

- d) Choose the *Derivation* pushbutton.
- e) Choose *Extras* → *Derivation Analysis* to evaluate the derivation.
- f) On the *Characteristic Derivation: Analyze Derivation Steps* screen, evaluate the derivation steps that appear.
2. Determine why *ORDER REASON* was not derived.
- a) On the *Characteristic Derivation: Analyze Derivation Steps* screen, expand *0040 Table lookup*.
- b) The Sales order is blank. This document is not a *Sales Order Document*, but a simulated derivation analysis. As a result, the *Order Reason* field cannot be created or derived from the simulation.
3. Check how the system determined the sales office field.
- a) View *Derivation Analysis* to find *Sales office from customer/sales org./dist.channel/division* by choosing the + sign (around step 39).
- b) For this derivation step, the *Source Fields* are *Customer*, *Sales Organization*, *Distribution Channel*, and *Division*. We entered the first three characteristics before performing the *Derivation*. If you scroll up to the derivation step *Division from Product* (around step 14), you will find the system derived the *Division* from the *Product*. As a result, the system had all the source fields necessary to derive *Sales Office*.
- c) Run transaction code */N* to return to the *SAP Easy Access* screen.



LESSON SUMMARY

You should now be able to:

- Define a derivation strategy



Evaluating with Product Costing

LESSON OVERVIEW

This lesson explains the function of valuation using product cost information.

Business Example

Ms. Schnell requires profitability reports for many characteristics. Some of the characteristics (such as the sales organization, sold-to, and product) are available in the selling and invoicing transactions, while others (such as product group and state) are available only in master records.

True freight costs are not known at the time of invoicing but are known only at month end, when invoices are received from freight vendors. In Financial Accounting (FI), these costs are not applied in a cost-based approach, but are calculated in CO-PA. As a result, Ms. Schnell was able to estimate the outcome for her plant before month end.

Mr. Cash, who is responsible for company planning, requests that sales quantities should be planned after considering the material requirements in CO-PA. In this case, the system must read the price and cost information and automatically apply it to the planned quantities. In this way, you can accurately determine the respective revenues, cost of sales, and the profit. The product costing module is used here, and you need to import the detail results into CO-PA. The import of detailed cost information helps analyze the true cost of sales and analyze and calculate the types of margins such as the margin after fixed costs and the margin after all costs.

You need to estimate freight and packaging costs for each line item on each order or invoice. Revenue and cost of goods sold are to be projected automatically for the materials with planned quantities in aggregate. Detailed information about product costing is to be imported for each line item on each order or invoice. For this reason, you require the following knowledge:

- An understanding of the valuation strategies
- An understanding of valuation using product cost information



Explain that with the valuation function, you can supplement the information that a transaction provides directly. Valuation can be performed both when updating actual values and in CO-PA planning. It is used in costing-based CO-PA only because account-based CO-PA is reconciled with FI and does not use estimated values.

There are various valuation techniques in CO-PA, such as valuation with conditions and costing sheets, valuation using material cost estimates, and valuation using user-defined valuation routines or user exits.

The condition technique can be used to estimate the values that are needed for analysis in CO-PA but are not known at the time the document is posted. As a result, to evaluate a sales transaction, any commissions, cash discounts, discounts, or freight costs which are not known at the time of invoicing can be estimated.

The product cost estimate technique is used to determine the manufacturing costs when data is updated to CO-PA. This technique can be used to supplement the revenues and sales deductions transferred from the invoice in the case of a sales transaction, with the fixed and variable manufacturing cost components belonging to the product.

You can use user-defined valuation routines to identify the values that cannot be determined using the condition and product cost estimate techniques. You can then implement user-defined valuation logic, if required.

Valuation Using Material Cost Estimates

Valuation using material cost estimates is used to determine the manufacturing costs when billing documents are transferred to CO-PA. By valuating transactions using cost estimates from Product Cost Planning, you can supplement the revenues and sales deductions transferred from the billing document with the fixed and variable manufacturing cost components belonging to the product. Transactions can be valuated with up to six different cost estimates in parallel. This option is available only for the costing key assigned to other characteristics.

The cost component split can be transferred in either the company code currency or the Management Accounting area currency. The manufacturing costs can be transferred to CO-PA according to the cost component split and the primary cost component split. Based on the Customizing settings made for Product Cost Planning, the cost component split and the primary cost component split are stored either in the main cost component split or in the auxiliary cost component split of a cost estimate.

The relevant cost estimates are assigned based either on the material or material type or on any other characteristics in an operating concern. You can access the costing data either using the plant of the CO-PA line item or using a special valuation plant stored in Customizing. To set up valuation using material cost estimates, work through the steps described in Customizing.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Configure a valuation strategy

Valuation Strategies



Emphasize that valuation is relevant only for costing-based CO-PA. In addition, explain that many value fields will be populated through the sales order management and Management Accounting interfaces. As a result, valuation will populate value fields if the data was not transferred from any other sources.

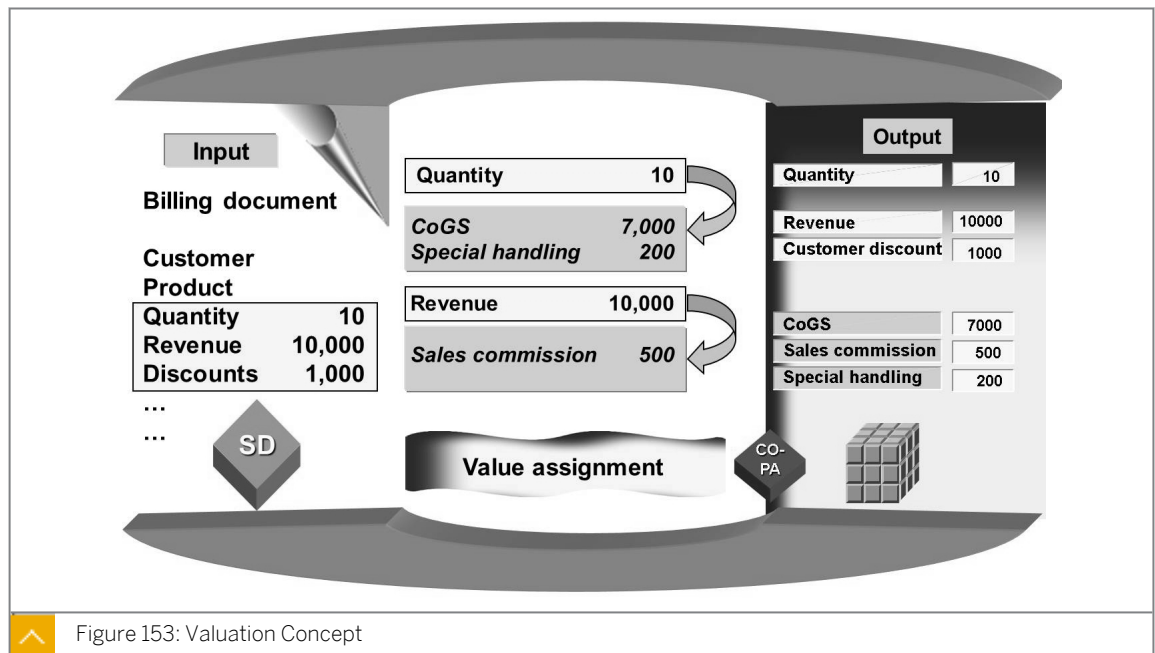


Figure 153: Valuation Concept

In costing-based CO-PA, you can configure a function known as valuation to supplement the performance information that a transaction provides directly. The additional information can be estimated, calculated, or retrieved from a different source. For example, you can set your system in such a way that it automatically calculates the internal commissions and freight costs that are expected in the respective business transaction when you transfer billing data into CO-PA.

In this way, you can evaluate the expected profit from the business transactions without all the actual data having been posted. Similarly, you can access the detailed product costing information.

Valuation – Overview

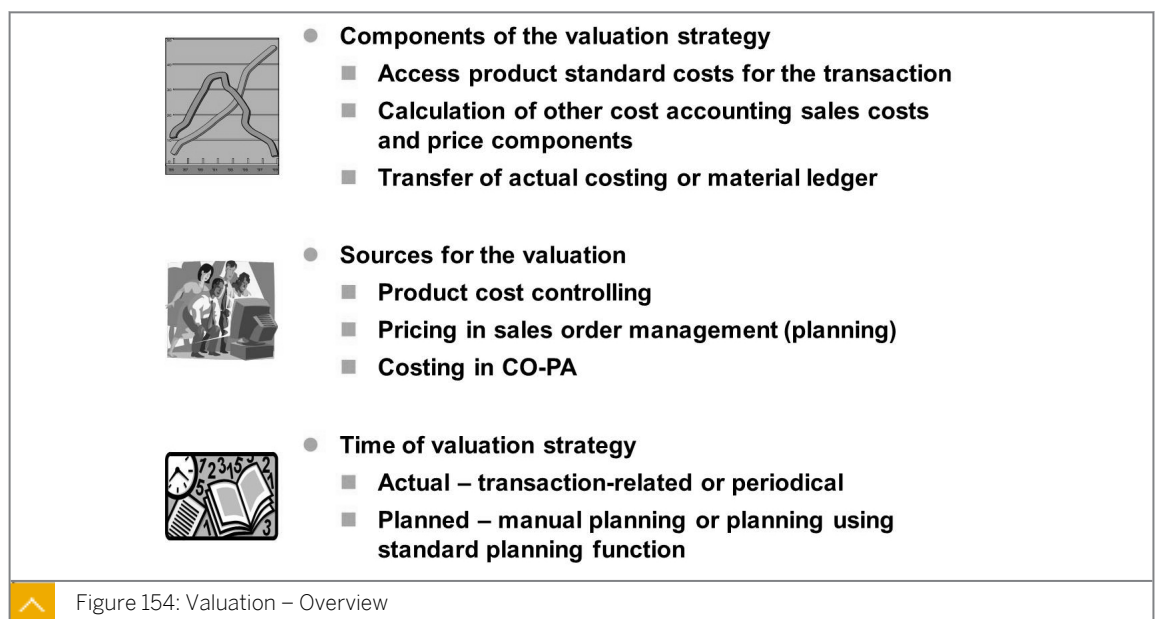


Figure 154: Valuation – Overview

Valuation can be used with either actual or planning data. Valuation is used in CO-PA planning to access pricing and product cost information for products that have planned quantities.

Pricing and product cost information is used when calculating projected revenue and cost-of-sales figures.

Valuation can be configured to function either in real time or periodically. Real-time evaluation of postings causes a higher system load. By postponing the evaluation, you help the system work efficiently. Similarly, periodic evaluation gives the option of revaluating the posted data.

Valuation Strategy

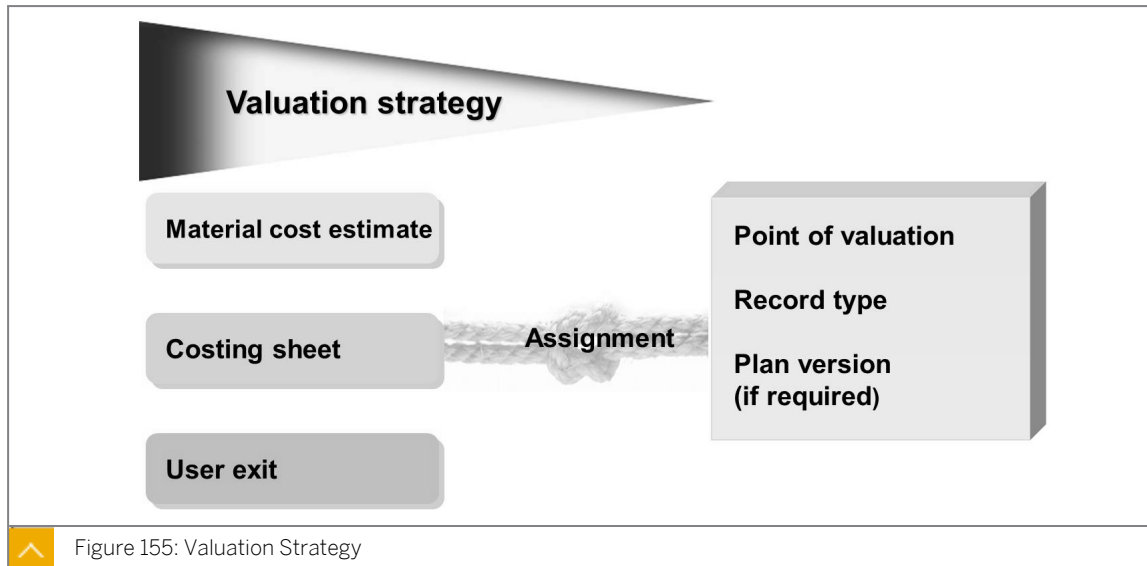


Figure 155: Valuation Strategy

Defining the valuation strategy is the pivotal activity carried out in valuation configuration. A valuation strategy may contain references to multiple valuation techniques, such as costing sheets, user exits, and product costing information. You need to apply these valuation techniques to a given transaction related to CO-PA.

You decide to what record types (F, A, B, C, and 0-9) and at what points (valuation points) each valuation strategy should apply. If a strategy is to be applied to planning data, you need to specify the relevant planning version.

The following valuation techniques populate the value fields in different ways:

- Costing sheets
Condition types are mapped to value fields.
- Product costing
Cost components are mapped to value fields.
- Value fields
Value fields are updated directly through user exits.



How to Evaluate the Configuration of a Valuation Strategy



Demonstrate the steps listed in Evaluate the Configuration of a Valuation Strategy exercise and Create a Line Item and Execute a Valuation Analysis exercise.

Valuation Strategies Using a Product Cost Estimate

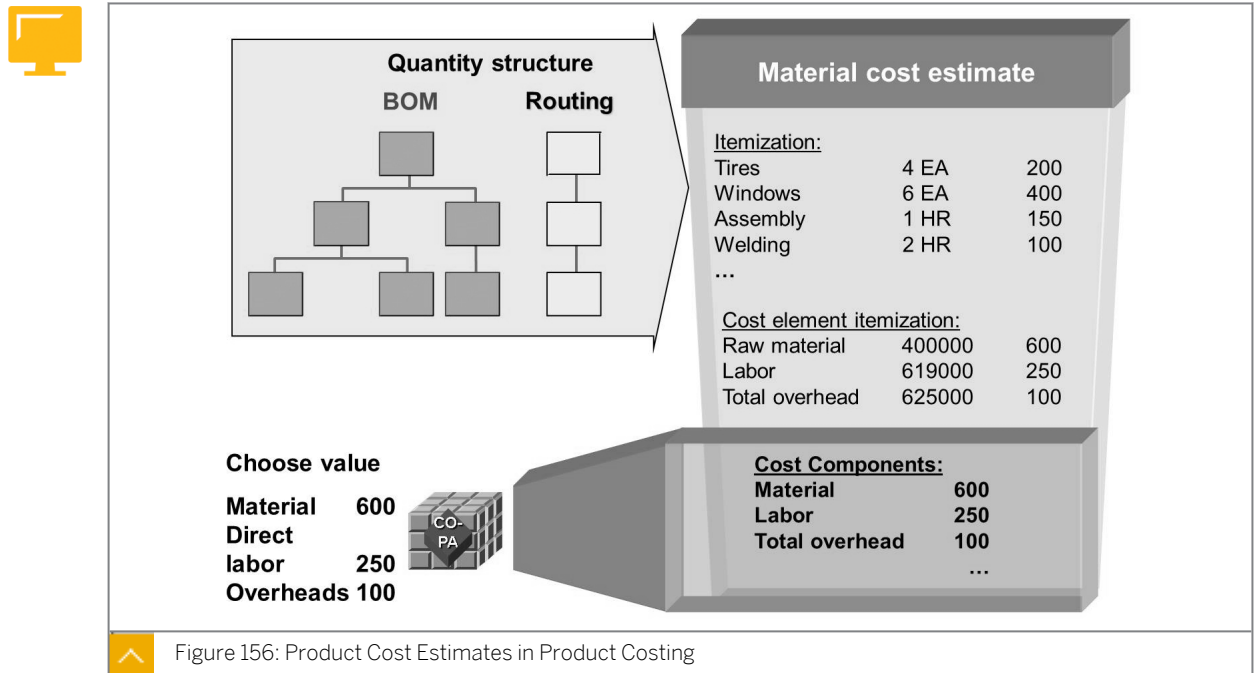


Figure 156: Product Cost Estimates in Product Costing

The Product Cost Controlling (CO-PC) module is used to generate the product cost estimates for materials. The results of a product cost estimate can be viewed in different ways, such as by item, cost element, or cost component. Through cost component values, valuation pulls the product cost estimate information from CO-PC and transfers the estimates to CO-PA. The valuation function can be used to import the extensive cost of sales information into CO-PA for flexible margin reporting.

In configuration, cost components are mapped to value fields. You can map each component to its own value field or multiple components to a single value field. You can also map the fixed and variable portions of a component to separate value fields. This function enables you to analyze cost of sales extensively in CO-PA as well as calculate and analyze multiple margin values in CO-PA.

Valuation Using Product Costing – Customizing

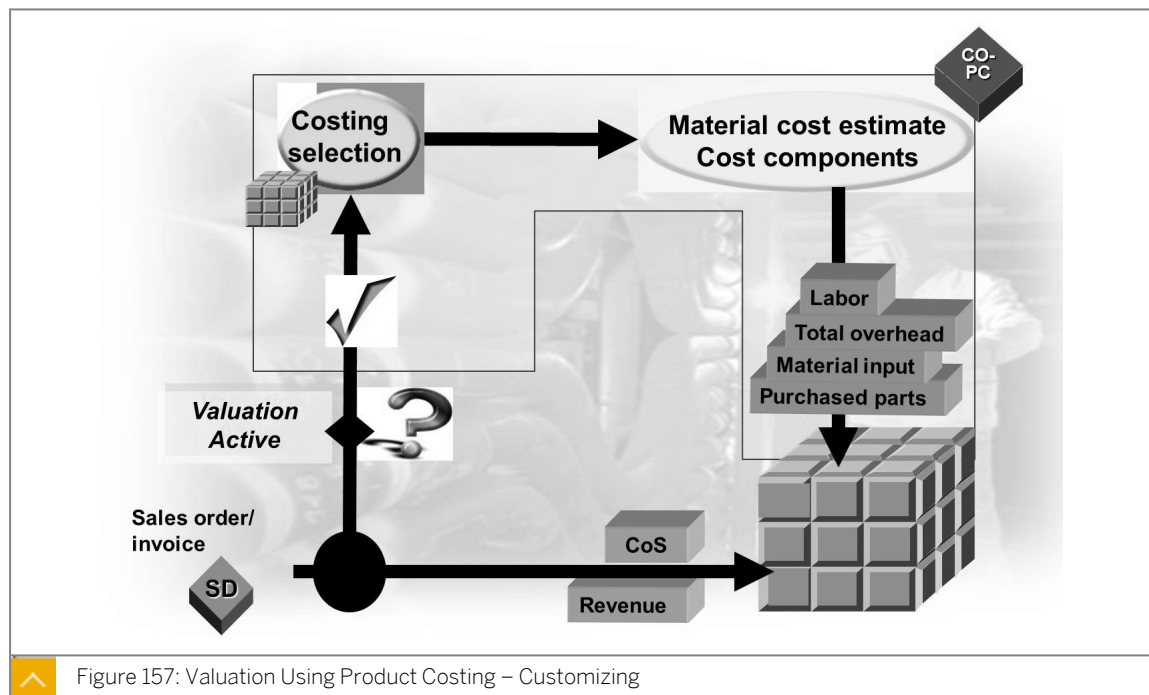


Figure 157: Valuation Using Product Costing – Customizing

Using a costing key, you can determine which cost estimate or costing variant should be used with which validity date for valuation. By assigning a costing key, you control which cost estimate, standard, modified standard, or current cost estimate is used in which case, depending on the material, material type, or any other combination of characteristics.

If an entry exists for the material, this entry has priority over the entry for the material type. The entry for the material type has priority over any entries defined for other characteristics.

In the assignment lines, you determine which values of the cost component structure are transferred to which value fields in the operating concern.

Valuation Using Product Costing – Period Indicator

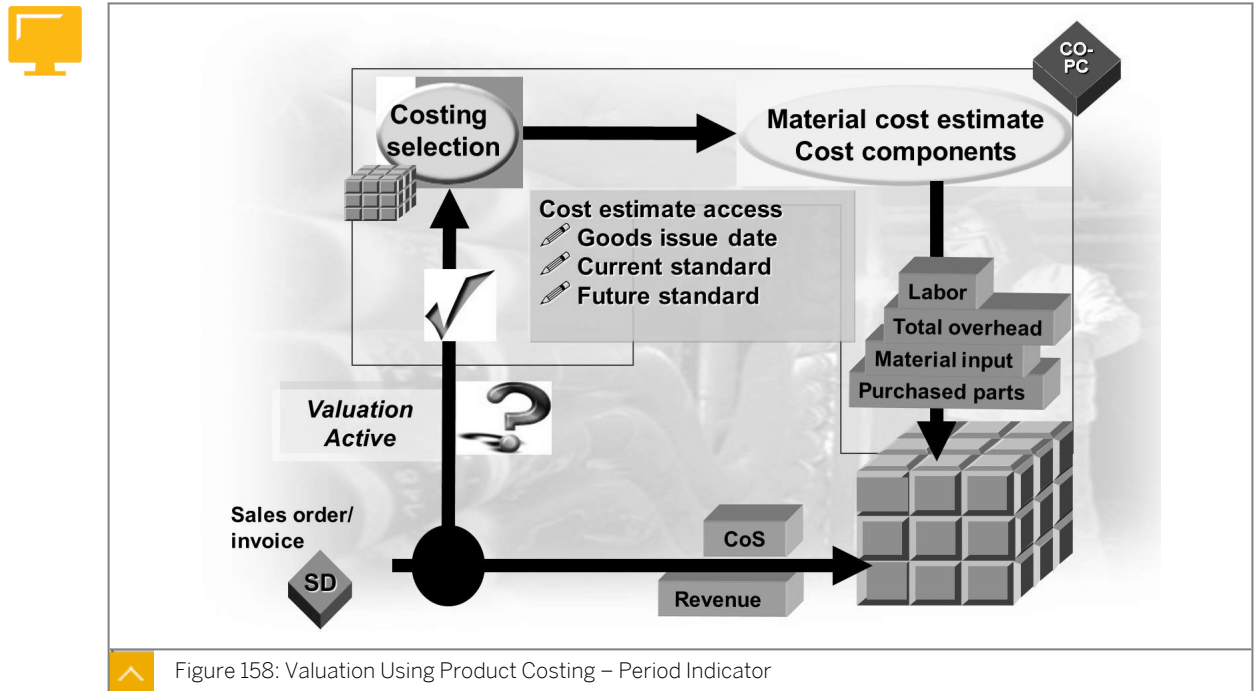


Figure 158: Valuation Using Product Costing – Period Indicator

When you define a costing key, you can enter either a costing date, period, or value for the period indicator. Using the plan period indicator, you specify the date for which the system looks for a valid material cost estimate in the database for product costing.

The following options are available for setting the plan period indicator:

- 0: Future standard cost estimate
- 1: Current standard cost estimate
- 2: Past standard cost estimate
- 3: Standard cost estimate valid on the posting date
- 4: Standard cost estimate valid on the date of goods issue

If you enter 0, 1, or 2 for the plan period indicator, the system reads the standard cost estimate as valid on the first day of the period. These indicators refer to the future, current, or past period for which the standard cost estimate is valid according to the entries in the valuation segment of the relevant material master record.

If you enter 3 or 4 for the plan period indicator, the system reads the standard cost estimate as valid on the given posting date or date of goods issue, regardless of what is stored in the material master.

Valuation Using Product Costing – Combination of Characteristics

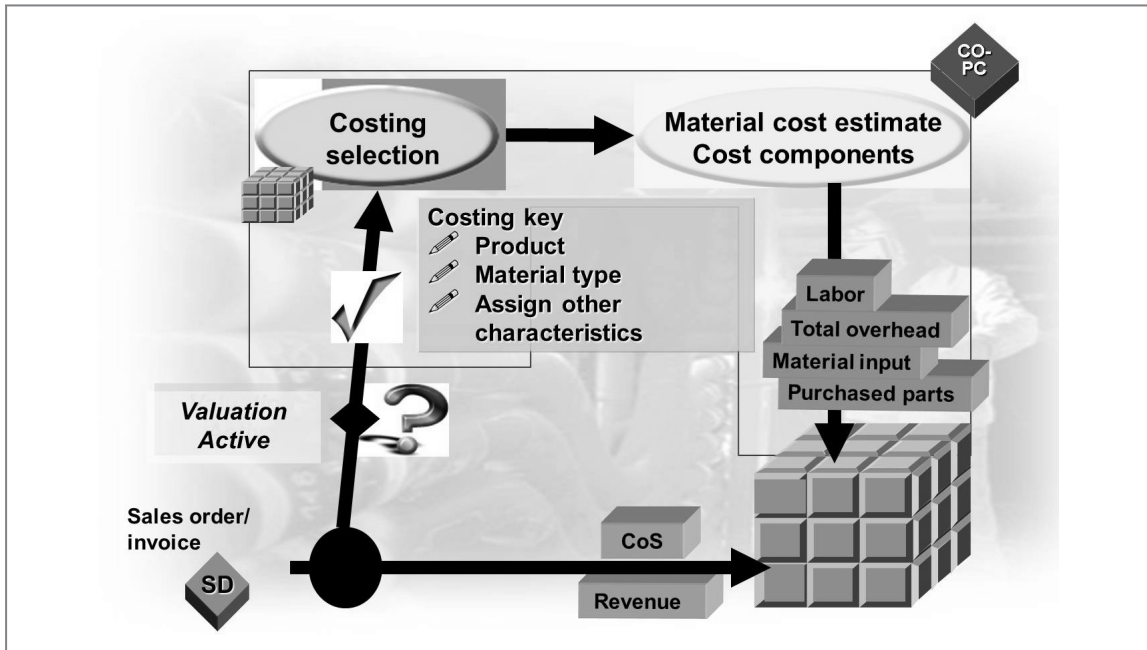


Figure 159: Valuation Using Product Costing – Combination of Characteristics

In addition to assigning the costing keys to products or material types, you can assign the costing keys to any combination of characteristics. This allows greater flexibility and control in using costing keys.

You can use up to three characteristics (such as plant, product, and group) as source fields. In this way, you do not need to assign costing keys to one specific material or material type. You can also assign costing keys to a combination of different characteristics. This makes it possible to access the cost of goods manufactured from different plants.



How to Evaluate the Configuration of a Valuation Strategy Using a Product Cost Estimate



Demonstrate the steps listed in Evaluate the Configuration of a Valuation Strategy exercise and Create a Line Item and Execute a Valuation Analysis exercise.

Unit 9

Exercise 18



Evaluate the Configuration of a Valuation Strategy

Business Example

Your controlling manager wants to ensure that sales and product managers understand the key cost components for the manufactured products. You want to determine the estimated costs for packing the finished products. This is 3.00 for each unit.



Note:

If you implement material costing in your SAP ERP system, you can transfer extensive information to CO-PA for calculation and analysis. CO-PA would then calculate the estimated cost of sales and different contribution margins, such as the margin after fixed costs and the margin after all costs. Valuation signifies the concept of supplementing the performance information with information provided directly by a transaction and allows access to in-depth material costing information.

Create a link to material costing to obtain extensive information about the key cost of manufacturing components, such as material and production labor.

In the Customizing settings for CO-PA, display the entries under costing keys for valuation.

What type of cost estimate is assigned to costing key I10?

For which period does the system access the material cost estimate?



Note:

Costing keys can be assigned to an individual product, a material type, or any characteristic such as a plant. This step defines the level at which the system accesses the material costing information. You can assign a valuation strategy to determine the transactions valued. To allocate the estimated production costs, such as materials and labor, to CO-PA value fields, you can assign the cost components of a material cost estimate to value fields.

1. Check which type of cost estimate is assigned to costing key I10.
2. Display the costing key assignment for product P-100. Which key is the assigned costing key?
3. Allocate the estimated production costs, such as materials and labor, to CO-PA value fields. You can assign the *cost components of a material cost estimate to value fields*. Display the value field assignments.

4. Display the currently released (status **FR**) standard cost estimate for product **P-100** in the Product Cost Planning component. Use costing variant **PPC1**. Notice that the costing lot size for the product is 100.
Display the total raw material cost, the cost component number, and description.



Evaluate the Configuration of a Valuation Strategy

Business Example

Your controlling manager wants to ensure that sales and product managers understand the key cost components for the manufactured products. You want to determine the estimated costs for packing the finished products. This is 3.00 for each unit.



Note:

If you implement material costing in your SAP ERP system, you can transfer extensive information to CO-PA for calculation and analysis. CO-PA would then calculate the estimated cost of sales and different contribution margins, such as the margin after fixed costs and the margin after all costs. Valuation signifies the concept of supplementing the performance information with information provided directly by a transaction and allows access to in-depth material costing information.

Create a link to material costing to obtain extensive information about the key cost of manufacturing components, such as material and production labor.

In the Customizing settings for CO-PA, display the entries under costing keys for valuation.

What type of cost estimate is assigned to costing key I10?

For which period does the system access the material cost estimate?




Note:

Costing keys can be assigned to an individual product, a material type, or any characteristic such as a plant. This step defines the level at which the system accesses the material costing information. You can assign a valuation strategy to determine the transactions valued. To allocate the estimated production costs, such as materials and labor, to CO-PA value fields, you can assign the cost components of a material cost estimate to value fields.

1. Check which type of cost estimate is assigned to costing key I10.
 - a) Run transaction code `ORKE`.
 - b) In Customizing, choose *Controlling* → *Profitability Analysis* → *Master Data* → *Valuation* → *Set Up Valuation Using Material Cost Estimate* → *Define Access to Standard Cost Estimates*.

- c) On the *Change View "Costing key": Overview* screen, select the row that has the *I10* value in the *Cstg key* column and choose the *Details* pushbutton to determine what type of cost estimate is assigned to costing key *I10*.
- d) On the *Change View "Costing key": Details* screen, under the *Control data for standard cost estimate* pane, check the following data:

Field Name or Data Type	Value
<i>Costing variant</i>	<i>PPC1</i>
<i>Costing version</i>	<i>1</i>
<i>Period indicator</i>	<i>Released standard cost estimate matching goods issue date</i>

- e) Choose  (*Back*) two times to return to the Customizing screen.
2. Display the costing key assignment for product P-100. Which key is the assigned costing key?
- a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Master Data* → *Valuation* → *Set Up valuation using Material Cost Estimate* → *Assign Costing Keys to Products*.




Hint:
In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field, select the *costing-based* radio button, and choose the *Continue* pushbutton.



Note:
Costing keys can be assigned to an individual product, a material type, or any characteristic, such as a plant. This step defines the level at which the system accesses the product costing information. You can assign a valuation strategy to determine the transactions valued.

- b) On the *Change View "Costing Key for Product": Overview* screen, check the following data:

Field Name or Data Type	Value
<i>PV (Point of valuation)</i>	<i>01</i>
<i>RecT. (Record type)</i>	<i>A and F (Incoming sales order and billing document)</i>
<i>Material</i>	<i>P-100</i>
<i>C. key 1 (Costing key)</i>	<i>I10</i>

- c) Choose  (*Back*) two times to return to the Customizing screen.

3. Allocate the estimated production costs, such as materials and labor, to CO-PA value fields. You can assign the *cost components of a material cost estimate to value fields*. Display the value field assignments.
 - a) In Customizing, choose *Controlling → Profitability Analysis → Master Data → Valuation → Set Up valuation using Material Cost Estimate → Assign Value Fields*.
 - b) In the *Determine Work Area: Entry* dialog box, enter **IDEA** in the *Operating concern* field and **01** in the *Cost component structure* field and choose the *Continue* pushbutton.



Hint:

The cost component structure is maintained in the product costing area.

- c) On the *Change View "Assign Costing Elements to Value Fields": Overview* screen, view the *Value Field* mappings and determine to which value field the *Raw materials* cost component is assigned.

Raw Materials is assigned to value field *VV150*.



Note:

You will see that more than one column exists for the value field assignments. This is used if you configure more than one costing key.

- d) Check whether the fixed or variable costs are assigned to this value field. Because the *F/V* column is set to 3, both the fixed and variable *Raw Materials* are assigned to value field *VV150*.



Note:

You can split the fixed and variable costs for the Cost Component Production labor, as per the settings made in configuration.


- e) Run transaction code */N* to return to the *SAP Easy Access* screen.
4. Display the currently released (status **FR**) standard cost estimate for product **P-100** in the Product Cost Planning component. Use costing variant **PPC1**. Notice that the costing lot size for the product is 100.

Display the total raw material cost, the cost component number, and description.

- a) On the *SAP Easy Access* screen, choose *Accounting → Controlling → Product Cost Controlling → Product Cost Planning → Material Costing → Cost Estimate with Quantity Structure → Display*.
- b) On the *Display Material Cost Estimate with Quantity Structure* screen, enter the following data and choose the *Cost Estimate* pushbutton.

Field Name or Data Type	Value
<i>Material</i>	P-100
<i>Plant</i>	1000

Field Name or Data Type	Value
<i>Costing Variant</i>	PPC1
<i>Costing Version</i>	1
<i>Valid On</i>	Today's date

- c) In the *Selection of material cost ests* dialog box, enter **FR** in the *Costing Status* field and choose the *Execute* pushbutton.
- d) On the *Display Material Cost Estimate with Quantity Structure* screen, choose  (*Cost Comps*).



Hint:

If you do not see this icon, you may have to pull the *Itemization for material* screen down.

- e) Check the total raw material cost, the cost component number, and the description. *Raw Materials* is *Cost Component 10* and the total cost is *13,636.84* (amount may vary).



Create a Line Item That Uses the Valuation Strategy

Business Example

Your controlling manager wants to ensure that sales and product managers understand the key cost components of manufactured products. You want to determine the estimated costs for packing the finished products. This is 3.00 for each unit.



Note:

If you implement material costing in your SAP ERP system, you can transfer extensive information to CO-PA for calculation and analysis. CO-PA would then calculate the estimated cost of sales and different contribution margins, such as the margin after fixed costs and the margin after all costs. Valuation signifies the concept of supplementing the performance information that a transaction provides directly, and allows access to in-depth material costing information.

To test your valuation strategy, enter a valuation simulation for your customer directly in CO-PA and execute a valuation analysis.

1. Enter a valuation simulation for your customer directly in CO-PA under *Accounting* → *Controlling* → *Profitability Analysis* → *Actual Postings* → *Create Line Items*. Fill in the header data as required and enter product **P-100** in plant **1000** on the entry screen. After carrying out derivation, enter **100** pieces in the *Invoiced Quantity* field with a revenue of 100,000. Carry out valuation.

Field Name or Data Type	Value
<i>Posting date</i>	Today's date
<i>Record Type</i>	F
<i>Customer</i>	T-CO05A##
<i>Sales Org.</i>	1000
<i>Distribution Channel</i>	10
<i>Company Code</i>	1000
<i>Product</i>	P-100
<i>Plant</i>	1000
<i>Invoiced Quantity</i>	100
<i>Revenue</i>	100,000

2. Execute a valuation analysis. How was the *Material Overhead Costs* field filled?



Create a Line Item That Uses the Valuation Strategy

Business Example

Your controlling manager wants to ensure that sales and product managers understand the key cost components of manufactured products. You want to determine the estimated costs for packing the finished products. This is 3.00 for each unit.



Note:

If you implement material costing in your SAP ERP system, you can transfer extensive information to CO-PA for calculation and analysis. CO-PA would then calculate the estimated cost of sales and different contribution margins, such as the margin after fixed costs and the margin after all costs. Valuation signifies the concept of supplementing the performance information that a transaction provides directly, and allows access to in-depth material costing information.



To test your valuation strategy, enter a valuation simulation for your customer directly in CO-PA and execute a valuation analysis.

1. Enter a valuation simulation for your customer directly in CO-PA under *Accounting* → *Controlling* → *Profitability Analysis* → *Actual Postings* → *Create Line Items*. Fill in the header data as required and enter product **P-100** in plant **1000** on the entry screen. After carrying out derivation, enter **100** pieces in the *Invoiced Quantity* field with a revenue of 100,000. Carry out valuation.

Field Name or Data Type	Value
<i>Posting date</i>	Today's date
<i>Record Type</i>	F
<i>Customer</i>	T-CO05A##
<i>Sales Org.</i>	1000
<i>Distribution Channel</i>	10
<i>Company Code</i>	1000
<i>Product</i>	P-100
<i>Plant</i>	1000
<i>Invoiced Quantity</i>	100
<i>Revenue</i>	100,000

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Actual Postings* → *Create Line Items* (KE21N).
- b) In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field, select the *costing-based* radio button, and choose the *Continue* pushbutton.
- c) On the *Create Line Items: Initial* screen, enter the posting date and record type as mentioned in the exercise and choose the *Execute* pushbutton.
- d) On the *Enter Line Items (Legal View)* screen, choose the *Characteristics* tab page and enter the following data:

Field Name or Data Type	Value
<i>Customer</i>	T-CO05A##
<i>Sales Org.</i>	1000
<i>Distribution Channel</i>	10
<i>Company Code</i>	1000
<i>Product</i>	P-100
<i>Plant</i>	1000

- e) On the *Value fields* tab page, enter **100** in the *Invoiced quantity* field and **100,000** in the *Revenue* field.
 - f) On the *Origin data* tab page, enter today's date in the *Goods Issue Date* field.
 - g) Choose the *Valuation* pushbutton. The system performs valuation and populates many of the value fields.
2. Execute a valuation analysis. How was the *Material Overhead Costs* field filled?
- a) On the *Enter Line Items (Legal View)* screen, choose *Extras* → *Valuation Analysis*. You can see the system used **001** in the *Val.strat.* column field and accessed *Material Cost Estimate*.
 - b) Determine the costing key that the system used.
On the *CO-PA Valuation Analysis* screen, choose the *Valuation strategy* tab page and then choose  (*Document Number List*). The system used *Costing Key I10*.
Choose  (*Back*) to return to the previous screen.
 - c) How did the system determine *Material Overhead Costs*?
Choose the *Result of valuation* tab page and check the values. Select the row that has the *Material Overhead* value in the *Text* field and choose the *Details* pushbutton. The analysis shows you how it found this value.
Additionally, you can use various configuration steps, such as the *Display Costing Key* pushbutton, the *Display Value Field Assignments* pushbutton, and the *Display Cost Component Structure* pushbutton. You can also go directly to the cost estimate by choosing the *Display Material Cost Estimate* pushbutton.
 - d) What value field is *Material Overhead Costs* mapped to?
Choose the *Display Value Field Assignments* pushbutton, and check the following data:

Field Name or Data Type	Value
<i>Name</i>	<i>Material Overhead</i>
<i>Cost Component</i>	<i>080</i>
<i>Field</i>	<i>VV250</i>

- e) Exit the *CO-PA Valuation Analysis* screen.
- f) Save your line item.



LESSON SUMMARY

You should now be able to:

- Configure a valuation strategy



Evaluating with a Costing Sheet

LESSON OVERVIEW

This lesson explains the configuration of a valuation strategy with a costing sheet.

Business Example

Ms. Schnell requires profitability reports for many characteristics. Some of these characteristics, such as the sales organization, sold-to, and product, are available in the selling and invoicing transactions. Some of these characteristics, such as the product group and the state, are available only in master records.

True freight costs are not known at the time of invoicing but are known only at month end, when invoices are received from freight vendors. These costs are not applied in a cost-based approach in Financial Accounting (FI), but are calculated in CO-PA. As a result, Ms. Schnell was able to estimate the expected freight costs for her plant before month end.

Mr. Cash, who is responsible for company planning, requests that sales quantities be planned with reference to the material requirements in CO-PA. In this case, the system should apply the price and cost information and automatically apply it to the planned quantities so that you can determine the respective revenues, cost of sales, and profit accurately. The product costing module is used here, and the detailed results need to be imported into CO-PA. The import of detail results helps analyze the true cost of sales and analyze and calculate the types of margins such as the margin after fixed costs and the margin after all costs.

As a result, freight and packaging costs are to be estimated for each line item on each order or invoice. Revenue and cost of goods sold are to be projected automatically for the materials with planned quantities in aggregate. Details of product costing information are to be brought in for each line item on each order or invoice. For this reason, you require the following knowledge:

- An understanding of valuation using a CO-PA costing sheet
- How to use the Customizing Monitor to perform valuation analysis



Explain that with the valuation function, you can supplement the information that a transaction provides directly. Valuation can be performed both when updating actual values and within planning. It is used in costing-based CO-PA only because account-based CO-PA is reconciled with Financial Accounting and does not use estimated values.

You can use various valuation techniques within CO-PA, such as valuation with conditions and costing sheets, valuation using material cost estimates, and valuation using user-defined valuation routines or user exits.

Valuation Using a Costing Sheet

In the case of CO-PA, the condition technique is used to determine estimated values. You need to explain some technical terms to familiarize participants with this technique. Explain that the condition technique is widely used throughout the SAP system. Although

participants need not become experts on conditions, they need to have a basic understanding of them.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Evaluate the configuration of a valuation strategy with a costing sheet

Valuation Strategy with a Costing Sheet

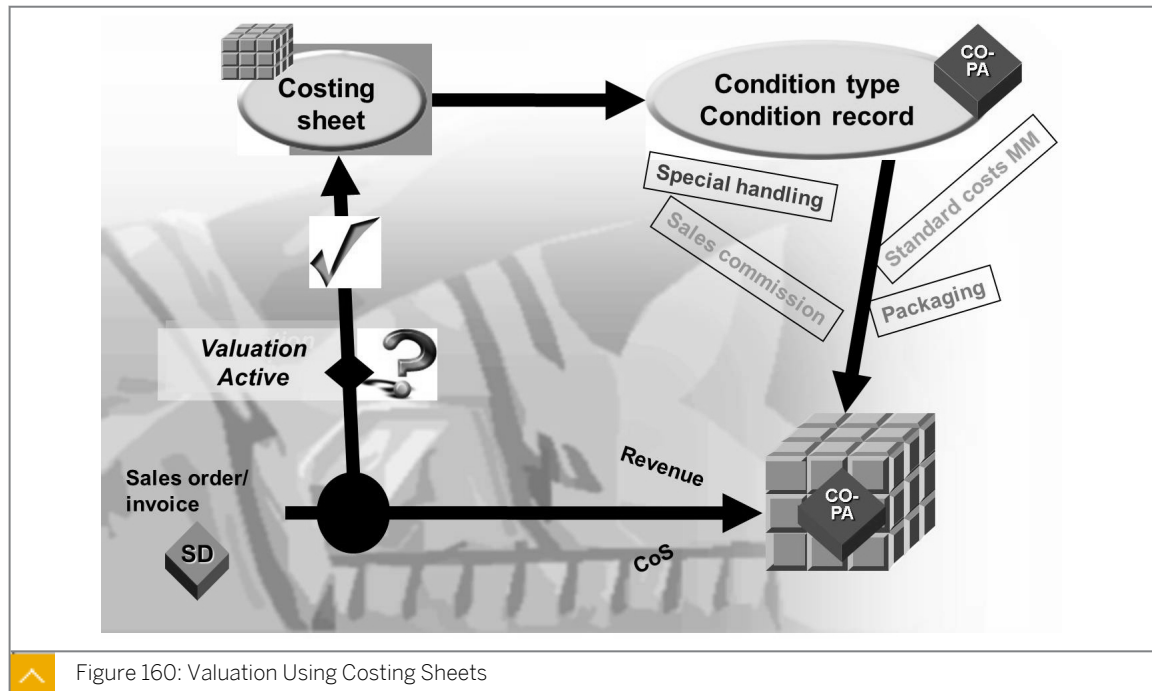


Figure 160: Valuation Using Costing Sheets



Begin by explaining the terms condition type, condition records, access sequence, and base values against calculated values.

Use the example of condition type Outgoing freight (OUTF). The term condition refers to a surcharge or reduction, which means the value to be calculated will be either positive or negative. As a result, in the case of freight, condition is a freight cost or a freight charge. A negative amount is a discount and a positive amount is a surcharge. The Detail pushbutton reveals the plus or minus sign logic that controls whether the condition results in an amount that is negative, positive, or both.

The surcharge or reduction overhead type determines whether a percentage of a specific value should be calculated or whether an absolute value multiplied by the value in the quantity field should be calculated. The question is whether the freight should be 10% of the cost of goods sold or USD 10 for each pound shipped.

Scales are lookup tables for the percentage or quantity-based values. For example, weight = GBP 10, freight rate = USD 5, weight = GBP 100, and freight = USD 8. Scales are not necessary, even when you can only consider a flat rate or a percentage.

The access sequence is directly related to the condition record. It defines at which organizational level a particular value is calculated. For example, the freight rate in plant 1000

is USD 10 and in plant 2000, it is USD 12. This access sequence is directly stored in the condition record that contains the value.

The costing sheet combines calculated conditions and base conditions. Base conditions are used in calculations. If you want to calculate freight based on the cost of goods sold, you must create cost of goods sold as the base condition. The value of the base condition originates in an application other than CO-PA.

Draw a data map using the following values:

Condition Type	Value Field	Costing Sheet	From or To	Source
OUTF	VV280	Step 60	30	N/A
COGS	VV140	Step 30	Blank	SDInterface

where,

OUTF = Outgoing freight

COGS = Cost of Goods Sold

Costing sheets are used to access or calculate special values. They are central components of prime importance in the condition technique, which is a method that the system can use throughout the SAP system to perform calculations.

Costing sheets consist of a sequence of user-defined condition types. Each user-defined condition type accesses a value or performs a specific calculation, as dictated by the definitions of the condition types. Each condition type is mapped to a value field in the operating concern.

Condition Types – Condition Records

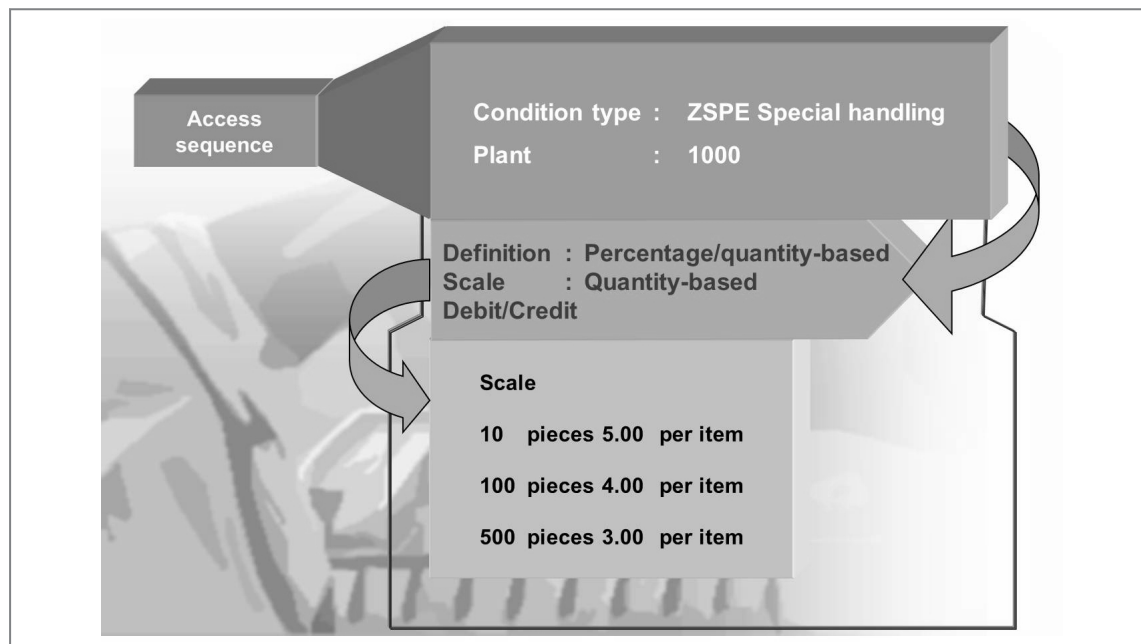


Figure 161: Condition Types – Condition Records

A condition type represents a step in a costing sheet.

The calculation that the system carries out in a step depends on the following control indicators:

- Condition category

The condition category classifies condition types according to predefined categories. The condition category has various control functions. For example, condition category U (for precious metal discounts and surcharges) causes a new price determination process to be carried out at the time of goods receipt, and condition category E (for cash discount) causes the discount to be derived from the terms of payment.

- Calculation type

The calculation type determines how the system calculates prices, reductions, or surcharges for a condition type. For example, calculation type can specify that a sales deduction is dependent on the quantity sold or a value scale.

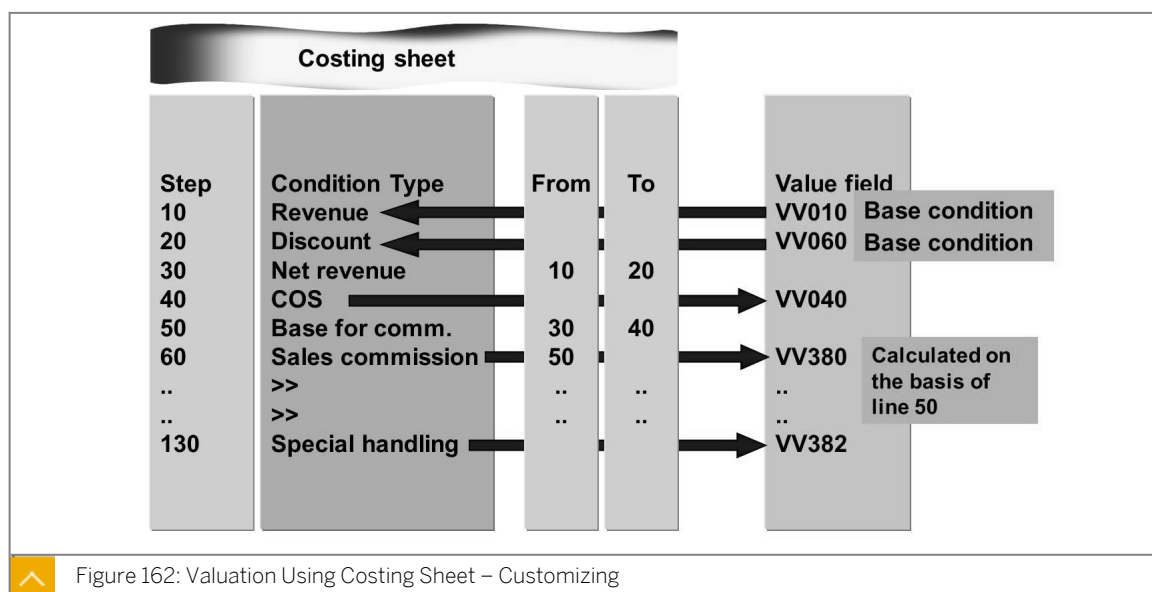
- Condition class

The condition class divides condition types into deductions or additions and prices.

- Scale basis

The scale basis determines how the system interprets the value or quantity scale for a condition. Scales can be dependent on a quantity or a currency amount.

Valuation Using Costing Sheet – Customizing



Base condition types form the basis for calculations. They signify the value fields that were populated through other means. These condition types must have a condition category *K*, a calculation rule *B*, and a condition class *B* on their master record.

Calculation condition types perform calculations on the lines in the costing sheets that represent the subtotals of amounts, such as base amounts. These condition types actually populate the value fields with values. Note that condition type definitions can vary.

A calculation condition type is assigned an access sequence with corresponding condition records. The condition records contain deductions, additions, or absolute values that refer to specific combinations of characteristic values.



How to Evaluate the Configuration of a Valuation Strategy Using a Costing Sheet



Demonstrate the steps listed in Task 1 of the Evaluate the Configuration of a Valuation Strategy Using a Costing Sheet exercise and Task 1 and 2 of the Create a Line Item That Uses the Valuation Strategy exercise.

Customizing Monitor

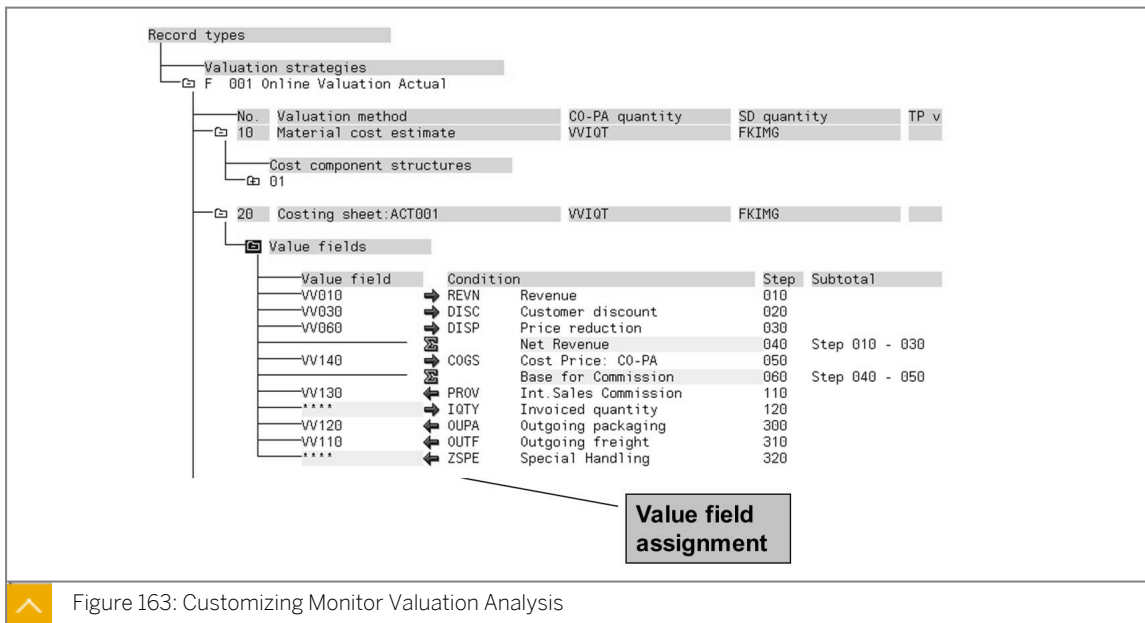


Figure 163: Customizing Monitor Valuation Analysis

The value field analysis function enables you to analyze all the flows of actual data to CO-PA. You can find inconsistencies by looking at the individual value fields. The Customizing Monitor – Valuation Analysis shows the value flows that the value field is involved in and the condition types or cost elements from which the value field inherits its values.

You can analyze the following actual value flows:

- Transfer of billing documents and incoming sales orders from sales order management
- Direct postings from FI and operations
- Order and project settlement from overhead cost orders and project system
- Cost center assessment from cost center accounting (CO-OM-CCA)
- External data transfer

Analysis of Valuation

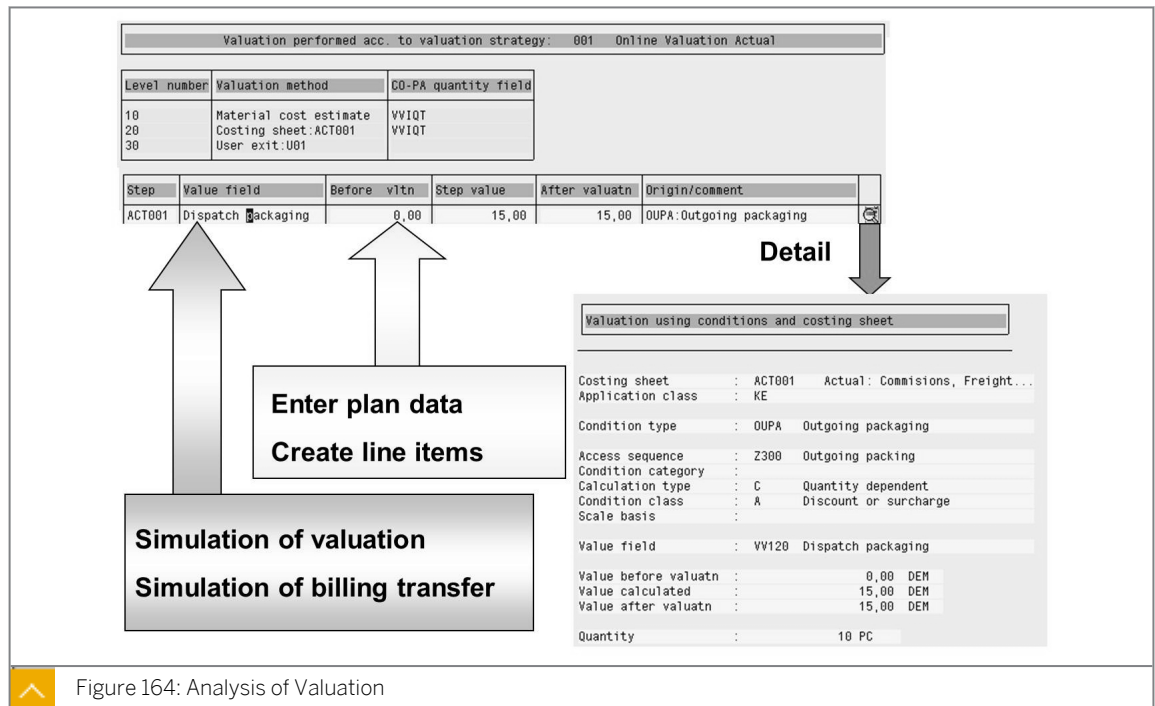


Figure 164: Analysis of Valuation

Valuation analysis is available to you when entering plan or actual data. Note that you can check valuation by simulating the entry of single line items. You can specify different valuation points in time and in this way check different valuation strategies.

To analyze the valuation errors during billing document transfer, execute a simulation of previously transferred billing documents and then analyze the results of your valuation strategies.



How to Analyze a Configuration Using the Customizing Monitor



Demonstrate the steps listed in the Analyze Configuration Using the Customizing Monitor exercise.



Evaluate the Configuration of a Valuation Strategy Using a Costing Sheet

Business Example

Your controlling manager wants to ensure that sales and product managers understand the key cost components for the manufactured products. You need to determine the estimated costs of packing the finished products, which is 3.00 for each unit.



Note:

If you implement material costing in your SAP ERP system, you can transfer extensive information to CO-PA for calculation and analysis. CO-PA then calculates the estimated cost of sales and different contribution margins, such as the margin after fixed costs and the margin after all costs. Valuation is the concept of supplementing performance information that a transaction provides directly and allows access to in-depth material costing information.

Use costing sheets to determine specific values, such as the cost of packaging materials.

The true costs for packaging and accessories are not known at the time of invoicing but are known at month end when packaging materials are posted and allocated to various cost centers. These costs are not accrued during the month in FI, but you want to estimate them in CO-PA so that your plant manager can estimate the profitability of all plants before month end. Use valuation to configure the system to calculate the estimated values for packaging supplies at the time an invoice is billed.

1. Display the costing sheet under *Valuation* in Customizing. What is the basis used to calculate estimated packaging (OUPA)?



Evaluate the Configuration of a Valuation Strategy Using a Costing Sheet

Business Example

Your controlling manager wants to ensure that sales and product managers understand the key cost components for the manufactured products. You need to determine the estimated costs of packing the finished products, which is 3.00 for each unit.




Note:

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1. Display the costing sheet under *Valuation* in Customizing. What is the basis used to calculate estimated packaging (*OUPA*)?
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Master Data* → *Valuation* → *Set Up Conditions and Costing Sheets* → *Create Condition Types and Costing Sheets*.
 - b) Ensure that you are in display mode. If not, change to display mode by choosing  (*Edit Display*).
 - c) On the *Pricing: Display Condition Type* screen, under the *Condition types* column, you can see that *OUPA* is *Surcharge/reduction*.
 - d) Double-click *OUPA* to determine how this overhead rate is calculated. The overhead rate is calculated on a *Quantity* basis.
 - e) Check the rate the system uses for valuating packaging for one piece of material P-100 in plant 1000.
Display the condition record by choosing the *Display Access Records* pushbutton.

- f) On the *Display Condition records: Selection* screen, select plan 1000 and choose the *Execute* pushbutton.
- g) On the *Display Outgoing packaging (OUPA): Overview* screen, check that the quantity-related overhead rate is 3.00 per piece.



Hint:

The quantity field assigned to the valuation strategy is used automatically.

- h) Run transaction code `/N` to return to the *SAP Easy Access* screen.

Unit 9

Exercise 21



Create a Line Item That Uses the Valuation Strategy

Business Example

Your controlling manager wants to ensure that sales and product managers understand the key cost components for manufactured products. You need to determine the estimated costs of packing the finished products, which is 3.00 for each unit.



Note:

If you implement material costing in your SAP ERP system, you can transfer extensive information to CO-PA to calculate and analyze the estimated cost of sales and different contribution margins, such as the margin after fixed costs and the margin after all costs. Valuation is the concept of supplementing performance information provided directly by a transaction and allows access to in-depth material costing information.

Create a line item that uses the valuation strategy.

Task 1

To verify that the costing sheet has been defined correctly, enter another line item in costing-based CO-PA. Enter your customer and all other relevant information. Enter product **P-100**. Enter **10** for *Invoiced Quantity*, **10,000** for *Revenue*, **8,000** for *Cost of Goods Sold*, and **1000** for *Plant*. Carry out the valuation. Determine the value of *Dispatch Packaging*.

1. Enter a line item to test the valuation strategy, particularly viewing the value fields valued from the costing sheet.

On the *Characteristics* tab page, enter the following data:

Field Name or Data Type	Value
<i>Customer</i>	T-CO05A##
<i>Product</i>	P-100
<i>Company Code</i>	1000
<i>Plant</i>	1000
<i>Sales Organization</i>	1000
<i>Distribution Channel</i>	10

On the *Value fields* tab page, enter the following data:

Field Name or Data Type	Value
<i>Invoiced quantity</i>	10

Field Name or Data Type	Value
<i>Revenue</i>	10000
<i>Cost of goods sold</i>	8000

Task 2

1. Create a pricing report for the existing condition records.

Field Name or Data Type	Positioning	Text	Selection	Required Input
<i>Plant</i>	Group Header of Pricing Report	The key field and the corresponding text are displayed	Selected	Deselected
<i>Condition Type</i>	Item Level of Pricing Report	The key field and the corresponding text are displayed	Selected	Deselected
<i>Validity period</i>	Item Level of Pricing Report	Blank	Selected	Deselected

2. Execute the pricing report you just created.



Create a Line Item That Uses the Valuation Strategy

Business Example

Your controlling manager wants to ensure that sales and product managers understand the key cost components for manufactured products. You need to determine the estimated costs of packing the finished products, which is 3.00 for each unit.



Note:

If you implement material costing in your SAP ERP system, you can transfer extensive information to CO-PA to calculate and analyze the estimated cost of sales and different contribution margins, such as the margin after fixed costs and the margin after all costs. Valuation is the concept of supplementing performance information provided directly by a transaction and allows access to in-depth material costing information.

Create a line item that uses the valuation strategy.

Task 1

To verify that the costing sheet has been defined correctly, enter another line item in costing-based CO-PA. Enter your customer and all other relevant information. Enter product **P-100**. Enter **10** for *Invoiced Quantity*, **10,000** for *Revenue*, **8,000** for *Cost of Goods Sold*, and **1000** for *Plant*. Carry out the valuation. Determine the value of *Dispatch Packaging*.

1. Enter a line item to test the valuation strategy, particularly viewing the value fields valued from the costing sheet.

On the *Characteristics* tab page, enter the following data:

Field Name or Data Type	Value
<i>Customer</i>	T-CO05A##
<i>Product</i>	P-100
<i>Company Code</i>	1000
<i>Plant</i>	1000
<i>Sales Organization</i>	1000
<i>Distribution Channel</i>	10

On the *Value fields* tab page, enter the following data:

Field Name or Data Type	Value
<i>Invoiced quantity</i>	10

Field Name or Data Type	Value
Revenue	10000
Cost of goods sold	8000

- a) On the SAP Easy Access screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Actual Postings* → *Create Line Items* (KE21N).
- b) On the *Create Line Items: Initial* screen, enter today's date in the *Posting date* field and **F** in the *Record Type* field.
- c) Select *Legal View* and *In Operating Concern and Company Code Currency*, and choose *Enter*.
- d) On the *Enter Line Items (Legal View)* screen, choose the *Characteristics* tab page and enter the data mentioned in the exercise.
- e) Choose the *Value fields* tab page, enter the data mentioned in the exercise, and choose the *Valuation* pushbutton.
The system performs valuation and populates many of the value fields.
- f) Check the value for *Dispatch Packaging*.
The value is 30, since the condition record for the condition type *OUPA* that the costing sheet *ACT001* accessed was 3 per piece: 3 x 10 pcs = 30.
- g) Save your line item, and return to the SAP Easy Access screen.

Task 2

1. Create a pricing report for the existing condition records.

Field Name or Data Type	Positioning	Text	Selection	Required Input
<i>Plant</i>	Group Header of Pricing Report	The key field and the corresponding text are displayed	Selected	Deselected
<i>Condition Type</i>	Item Level of Pricing Report	The key field and the corresponding text are displayed	Selected	Deselected
<i>Validity period</i>	Item Level of Pricing Report	Blank	Selected	Deselected

- a) On the SAP Easy Access screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Master Data* → *Condition Lists* → *Create* (KE4L).

- b) On the *Create Pricing Report* screen, enter **z#** in the *Name of List* field and **Pricing Report Group ##** in the *Title* field. Choose *Enter*.

For #, use the letter of the alphabet that corresponds to your group number.

#	A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	R	S	T
No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18



Hint:
If you are group 1, enter **zA**.

- c) On the *Create Pricing Report* screen, under the *Field Selection* pane, choose the row that has the *Plant* value in the *Field name* field and then choose the *AND* pushbutton.
- d) In the *Key Combinations* pane, choose the row that has the *506 Access to Plant* value, and then choose *Enter*.
- e) In the *Field positioning* table, enter the data given in the exercise.
- f) Save your pricing report.
- g) You are prompted for a workbench request. In the *Prompt for Workbench request* dialog box, choose the *Create* pushbutton.
- h) In the *Create Request* dialog box, enter **Group ##** in the *Short Description* field and then choose the *Save* pushbutton.
- i) In the *Prompt for Workbench request* dialog box, choose the *Continue* pushbutton to create a request.
- j) Return to the *SAP Easy Access* screen.
2. Execute the pricing report you just created.
- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Master Data* → *Condition Execute* (KE4Q).

- b) On the *Execute Pricing Report* screen, enter **z#** (if it is not there) and then choose the *Execute* pushbutton.

#	A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	R	S	T
No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

- c) On the *Pricing Report Group ##* screen, enter the following data and then choose the *Execute* pushbutton.

Field Name or Data Type	Value
<i>Plant</i>	1000
<i>Condition Type</i>	OUFA

Field Name or Data Type	Value
<i>Validity range</i>	Today's date to 12/31/9999 (or 31/12/9999)
<i>at start of validity period</i>	Select
<i>at end of validity period</i>	Select

- d) The system displays a list of the conditions for outgoing packaging. You can display the details of the condition by highlighting the outgoing packaging row and choosing the *Display* pushbutton.
- e) Run transaction code `/N` to return to the *SAP Easy Access* screen.



Analyze Configuration Using the Customizing Monitor

Business Example

Your controlling manager wants to ensure that sales and product managers understand the key cost components for manufactured products. You want to determine the estimated costs of packing the finished products. This is 3.00 for each unit.



Note:

If you implement material costing in your SAP ERP system, you can transfer extensive information to CO-PA to calculate and analyze the estimated cost of sales and different contribution margins, such as the margin after fixed costs and the margin after all costs. Valuation is the concept of supplementing the performance information that a transaction provides directly and allows access to in-depth material costing information.

Use the Customizing Monitor to analyze the configuration settings you have made. The Customizing Monitor also allows you to evaluate the existing settings, the use of characteristics, and value fields.

1. Analyze the Customizing settings for the planning data that was entered manually. If you have created a sales plan for the billing data manually, how does the system value your data, assuming you are using version 100?
2. Try to establish the reports of the **WWSBU** characteristic used in your client. Use the Customizing Monitor to determine this.



Analyze Configuration Using the Customizing Monitor

Business Example

Your controlling manager wants to ensure that sales and product managers understand the key cost components for manufactured products. You want to determine the estimated costs of packing the finished products. This is 3.00 for each unit.




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If you implement material costing in your SAP ERP system, you can transfer extensive information to CO-PA to calculate and analyze the estimated cost of sales and different contribution margins, such as the margin after fixed costs and the margin after all costs. Valuation is the concept of supplementing the performance information that a transaction provides directly and allows access to in-depth material costing information.

Use the Customizing Monitor to analyze the configuration settings you have made. The Customizing Monitor also allows you to evaluate the existing settings, the use of characteristics, and value fields.

1. Analyze the Customizing settings for the planning data that was entered manually. If you have created a sales plan for the billing data manually, how does the system value your data, assuming you are using version 100?
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Tools* → *Analysis* → *Check Customizing Settings*.
 - b) On the *Customizing Monitor - Overview of Valuation: Initial* screen, choose *Customizing Monitor* → *Analysis Options* → *Overview of Valuation*.
 - c) Enter the following data and then choose the *Execute* pushbutton.

Field Name or Data Type	Value
<i>Point of valuation</i>	03
<i>Plan Version</i>	100
<i>Billing Document</i>	Select

- d) The system uses *Valuation Strategy 003*. This valuation strategy first accesses *Costing sheet: COPA10*, then *Costing sheet: ACT001*, looks for information about *Material cost estimate*, and then accesses *User exit: U01*.
- e) Choose  (*Back*) to return to *Customizing Monitor - Overview of Valuation: Initial* screen.

2. Try to establish the reports of the **WWSBU** characteristic used in your client. Use the Customizing Monitor to determine this.
- a) On the *Customizing Monitor - Overview of Valuation: Initial* screen, choose *Customizing Monitor* → *Where-Used List*.
- b) On the *Customizing Monitor - Where-Used List: Initial* screen, enter the following data and choose the *Execute* pushbutton.

Field Name or Data Type	Value
<i>Characteristic</i>	WWSBU
<i>The current client</i>	Select

- c) Choose *Where-Used List for Field: Strategic Bus. Unit (WWSBU)* → *Information System* → *Reports* → *Costing-Based*.
The reports *IDES-300*, *IDES310*, and so on use this field. The Customizing Monitor can be used for various analyses.



LESSON SUMMARY

You should now be able to:

- Evaluate the configuration of a valuation strategy with a costing sheet



Learning Assessment

1. All Profitability Analysis (CO-PA) relevant transactions are affected by the _____.

Choose the correct answer.

- A valuation configuration
- B derivation strategy
- C valuation strategy
- D SAP system

2. Derivation _____ can be created to derive user-defined characteristics.

Choose the correct answer.

- A logic
- B rule entries
- C rules
- D steps

3. The system automatically creates a standard derivation strategy for each operating concern.

Determine whether this statement is true or false.

- True
- False

4. Product cost estimates for materials are created in which of the following modules of SAP?

Choose the correct answer.

- A Profitability Analysis (CO-PA)
- B Internal Order Accounting
- C Product Cost Controlling (CO-PC)
- D Profit Center Accounting (EC-PCA)

5. The calculation type determines how the system interprets the value or quantity scale for a condition.

Determine whether this statement is true or false.

- True
- False

6. The _____ consists of a sequence of user-defined condition types.

Choose the correct answer.

- A condition category
- B costing sheet
- C condition class
- D operating concern



Learning Assessment - Answers

1. All Profitability Analysis (CO-PA) relevant transactions are affected by the _____.

Choose the correct answer.

- A valuation configuration
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- D SAP system

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UNIT OBJECTIVES

- Define the flow of actual data
- Evaluate the integration with sales order management
- Allocate overhead costs to CO-PA
- Perform a cost center assessment

- Allocate Activity Costs
- Settle internal orders to CO-PA
- Create direct postings from FI
- Post a revaluation of a material and view the CO-PA documents
- Define order-related variances and their settlement to CO-PA
- Analyze the sales order with a cost collector
- Define top-down distribution
- Define periodic valuation



Defining the Flow of Actual Data

LESSON OVERVIEW

This lesson explains the value flows in Profitability Analysis (CO-PA). This lesson also explains the steps required to prepare CO-PA for actual value flows.



This lesson gives participants an initial impression of the actual value flows in CO-PA. Based on the example report for the costing-based CO-PA or account-based CO-PA, explain the modules from which the individual values in a profitability report are derived.

Business Example

Your corporate controller asks you to explain the differences in the actual value flow in the costing-based CO-PA and account-based CO-PA. Your sales manager in Japan, Mr. Cash, is familiar with the sales order process. He asks you to explain at what point data is posted to CO-PA. In addition, he wants to know the order in which data is specified in CO-PA.

To completely allocate the expenses for research and development that are currently collected at the production group level through internal orders, Mr. Cash wants to know if the internal orders can be settled to CO-PA. The logistics department in your company wants to allocate costs across the manufacturing plants and the distribution centers in Canada, the United States, and Japan. They can track the services they provided at the division level and want to ensure that logistics costs are included in the contribution margin reports.

Your marketing department has spent an extensive amount of time training the worldwide sales force and product management on the advantages of the new “Blue Bicycle” product line. They have tracked training hours and want to allocate costs to all the products within the “Blue Bicycle” product group. The product manager for Taiwan has been informed of price increases for bicycle seats that are purchased externally, and wonders how that will affect contribution margins. He also wants to analyze the cost of production variances due to scrap and the use of reflectors for the three models within the “Blue Bicycle” product group.

For this reason, you require the following knowledge:

- An understanding of the flow of actual data in CO-PA
- An understanding of the sources of value fields



Explain the steps required to prepare CO-PA for actual value flows. Demonstrate briefly the number assignment and the function for activating CO-PA. In addition, explain the concept of the record types and show where (if required) other record types can be configured. A reason for creating record types may be that data is manually transferred for planning.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Define the flow of actual data

The Flow of Actual Data

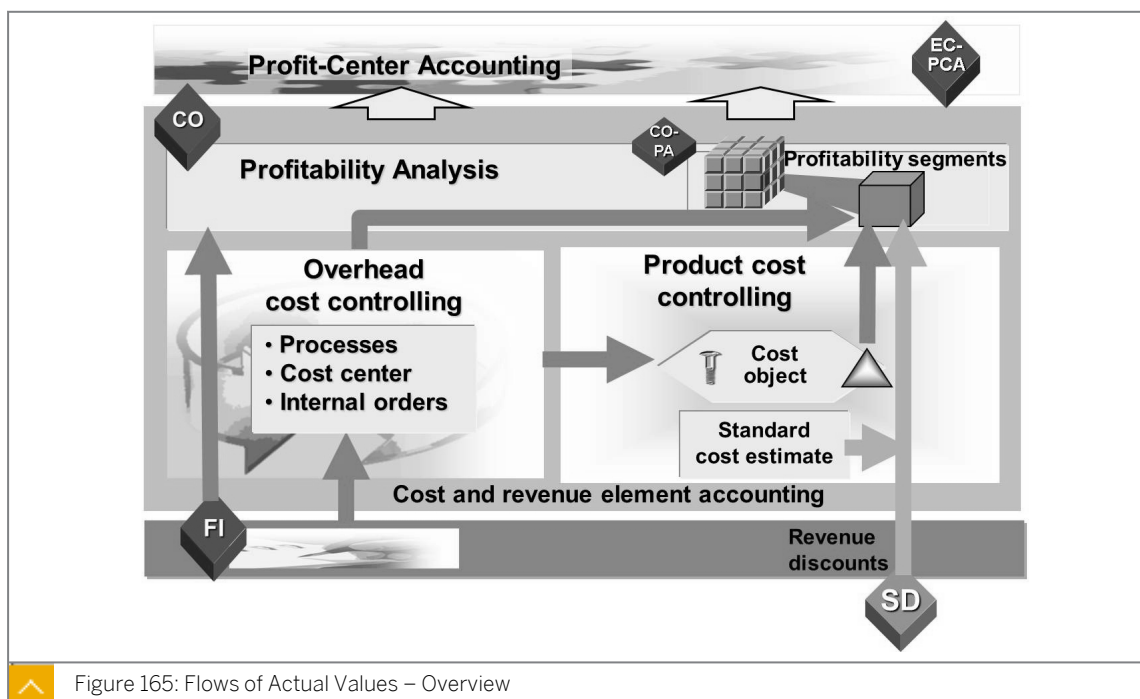


Figure 165: Flows of Actual Values – Overview

Revenues and discounts are transferred to profitability segments in CO-PA at the point of billing in sales order management. Quantities sold are valued at the same time with the standard cost of goods manufactured according to the cost component split from Product Cost Controlling (CO-PC).

In Overhead Cost Controlling (CO-OM), primary postings are posted to the objects in CO-OM and allocated to the cost object by the most source-related means available. The actual cost of goods manufactured is also allocated to the cost object, and the cost centers that perform the activity are credited.

From the viewpoint of CO-PA, production variances lead to under absorption or over absorption for the cost centers performing the activity and production variances for the corresponding cost objects, such as production orders.

Production variance is the difference between the actual cost of goods manufactured and the standard cost determined for cost objects. In this case, production orders are divided into variance categories and settled to profitability segments.

Overhead costs remaining in CO-OM objects are allocated to the originating profitability segments.

Flow of Actual Values – Results

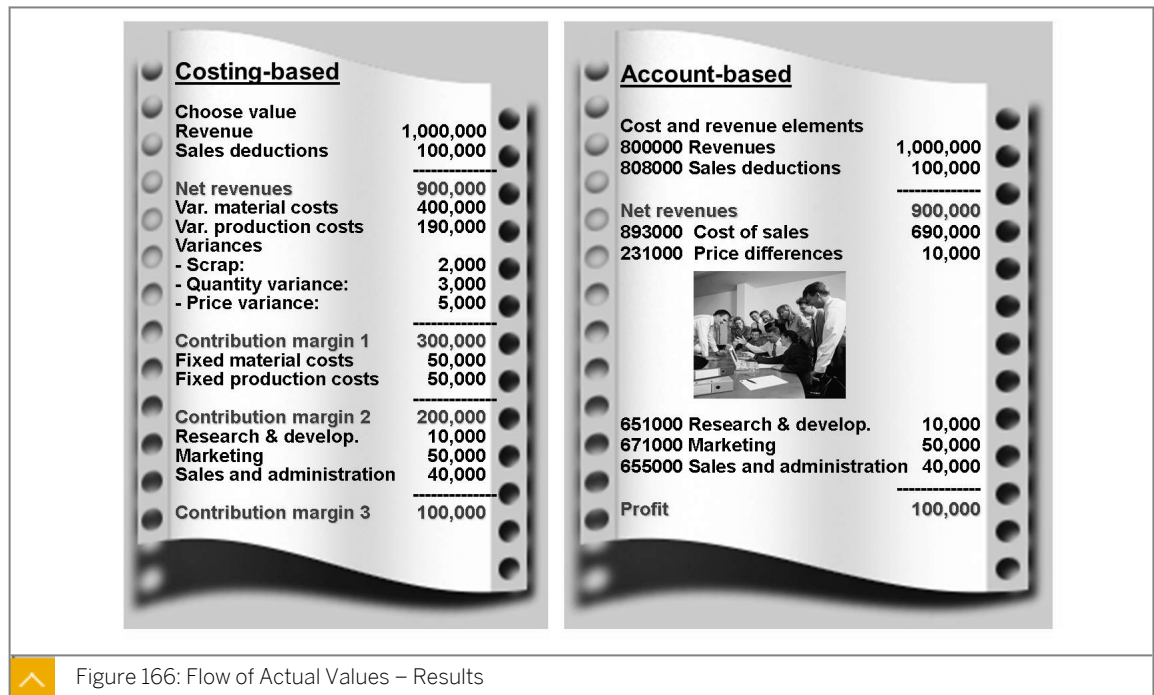


Figure 166: Flow of Actual Values – Results

The method of determining period operating results in CO-PA is based on the assumption that the success of a company can be measured by its transactions with other companies. The aim is to supply the sales, marketing, product management, controlling, and corporate planning teams with decision-support information.

The sales-oriented approach in CO-PA means that no contribution to the success of the organization is made until a sales transaction is completed. As a result, the products sold are transferred to CO-PA in accordance with the cost-of-sales accounting method and provide information about sales revenues and sales deductions.

Once the information about products sold has been transferred to CO-PA, you can compare this net revenue with the cost of sales. The cost of the products consists of the cost of goods manufactured, products sold, or services rendered in addition to any known production variances. To complete your profitability data, you can also assign overhead costs to profitability segments during your period-end closing activities.

Sources of Value Fields



SD 	Billing document	Quantity Sales Sales deductions Cost of goods sold
CO-PC 	Cost estimate	Variable costs of goods manufactured Fixed costs of goods manufactured
FI 	General ledger posting	Bonuses Freight costs
CO-OM 	Cost center Order Process	Sales and administration costs Marketing costs Process costs
PS 	WBS element Network operation	Research & Development costs
CO-PC-OBJ 	Production order	Production variances
CO-PA 	Additional costs	Estimated discounts Estimated bonuses

Figure 167: Sources of Value Fields

The value fields in the costing-based CO-PA contain the amounts and quantities that you want to report on. The value fields represent the finest level of detail at which costs and revenues are broken down. One of the most important tasks in Customizing for the costing-based CO-PA is to assign your costs and revenues to the required value fields. This assignment enables you to calculate the contribution margins that your organization requires in Information System.



How to Evaluate the Configuration of Number Ranges and Record Types

1. Show how to set up the number assignment for the costing-based CO-PA.
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Flow of Actual Values* → *Initial Steps* → *Define Number Range for Actual Postings*.
2. Show how to set up the number assignment for account-based CO-PA.
 - a) In Customizing, choose *Controlling* → *General Controlling* → *Organization* → *Maintain Number Ranges for Controlling Documents*.
3. Demonstrate the *Activate Profitability Analysis* function. Using this function, you decide to activate CO-PA as well as the type of CO-PA to use.
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Flow of Actual Values* → *Activate Profitability Analysis*.
4. Demonstrate how to define additional record types.
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Tools* → *Data Transfers Between CO-PA and Other Systems* → *Initial Steps* → *Define Record Types*.



LESSON SUMMARY

You should now be able to:

- Define the flow of actual data



Analyzing the Integration with Sales Order Management

LESSON OVERVIEW

This lesson explains the data flow from sales order management to Profitability Analysis (CO-PA). This lesson also explains condition types.



Transferring data from the sales order management module:

Explain the classical process flow of a sales order in some detail, including creating the sales order in the system, the goods issue posting, and billing. Work on establishing the differences between the two approaches and explain the possibilities that the costing-based approach offers on account of the valuation function.

Business Example

Your corporate controller asks you to explain the differences in the actual value flow in the costing-based CO-PA and account-based CO-PA. Your sales manager in Japan, Mr. Cash, is familiar with the sales order process. He asks you to explain at what point data is posted to CO-PA. In addition, he wants to know the order in which data is specified in CO-PA.

To completely allocate research and development costs, which are currently collected at the product group level using Controlling (CO) internal orders, Mr. Cash wants to know if internal orders can be settled to CO-PA. For this purpose, you must explain the flow of actual values into CO-PA and demonstrate the value flow differences between the costing-based CO-PA and account-based CO-PA. In addition, you must explain the data flow from sales order management.

For this reason, you require the following knowledge:

- An understanding of the data flow from sales order management to CO-PA
- An understanding of condition types



Reflect on the debits and credits in the various applications and the generic sales order flow. You want to emphasize that you are only talking about the sales from stock and not about make to order or service orders.

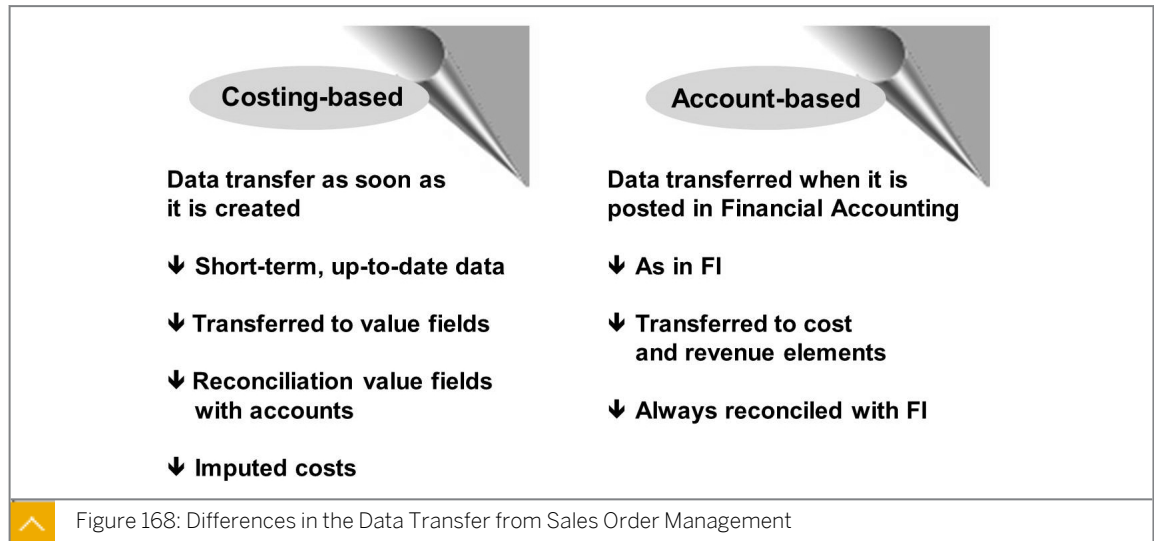


LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Evaluate the integration with sales order management

Differences in the Data Transfer from Sales Order Management to Different Types of Profitability Analysis



The interface with sales order management plays a central role in CO-PA. Notice the value differences when data is transferred to the costing-based CO-PA and account-based CO-PA.

The main purpose of the costing-based CO-PA is to provide sales order management with a tool for analyzing the expected results generated by sales transactions. The main feature of the costing-based CO-PA is the use of value fields and the automatic calculation of anticipated or accrual data (valuation). The advantage of Costing-based CO-PA is that it matches revenue and costs.

Account-based CO-PA enables you to reconcile cost and Financial Accounting (FI) at any time at the account level. In contrast to the costing-based CO-PA, for the account-based CO-PA, the system stores values in cost and revenue elements, which form the common account structure for all the financial applications. All the costs and revenues are posted to account-based CO-PA simultaneously by using the same valuation approach as FI. The main difference here is that the cost of sales is transferred at the point of goods issue and not with the revenues.

Sales from Stock

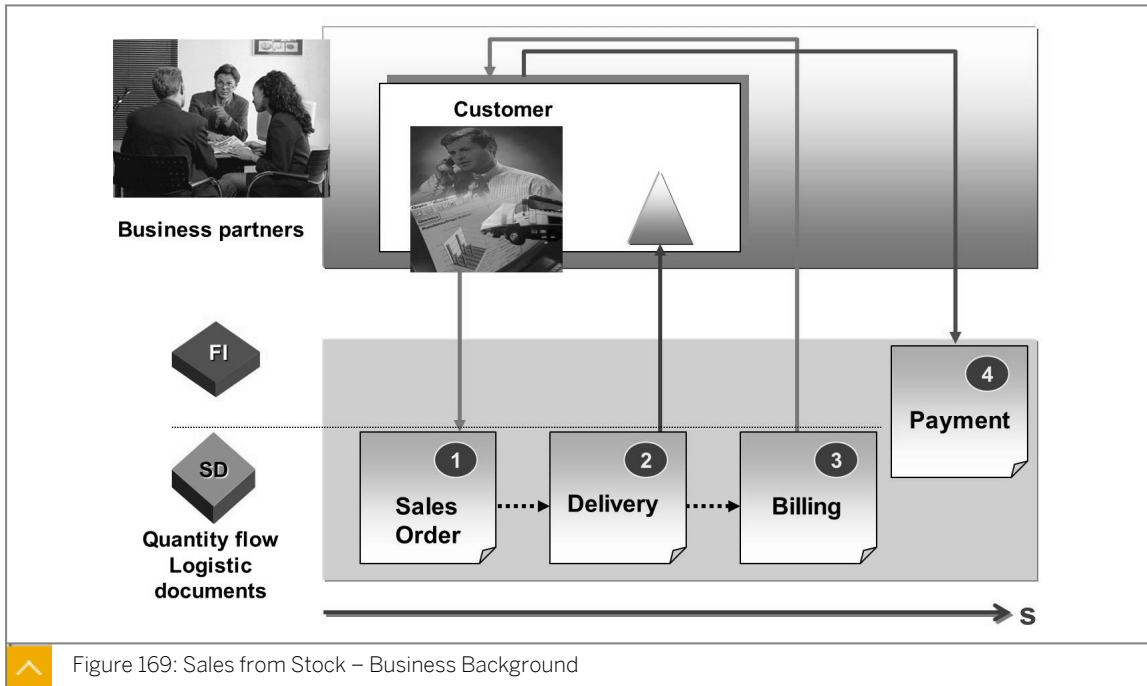


Figure 169: Sales from Stock – Business Background

The sales order management application component consists of functions for handling quotations, orders, deliveries, and billing. Each of these areas has its own sales documents, which contain the relevant data for that activity.

The central document in sales order management is the sales order. The sales order may be based on existing inquiries and customer quotations. When you create a sales order, the information about the customer and the products or services sold is stored in the document.

The following information is passed on to all the subsequent documents created for business transactions, such as delivery and billing:

- The delivery is created when the product is shipped to the customer, which means delivery is categorized as goods issue.
- A billing document is created to bill the customer for the goods or services provided to them.

The creation of the billing document is a central process in the SAP system and the starting point for the data transfer to Financial Analytics. In some cases, data is transferred to the costing-based CO-PA and account-based CO-PA at different times using different valuation approaches.

From Sales Order to Costing-Based CO-PA

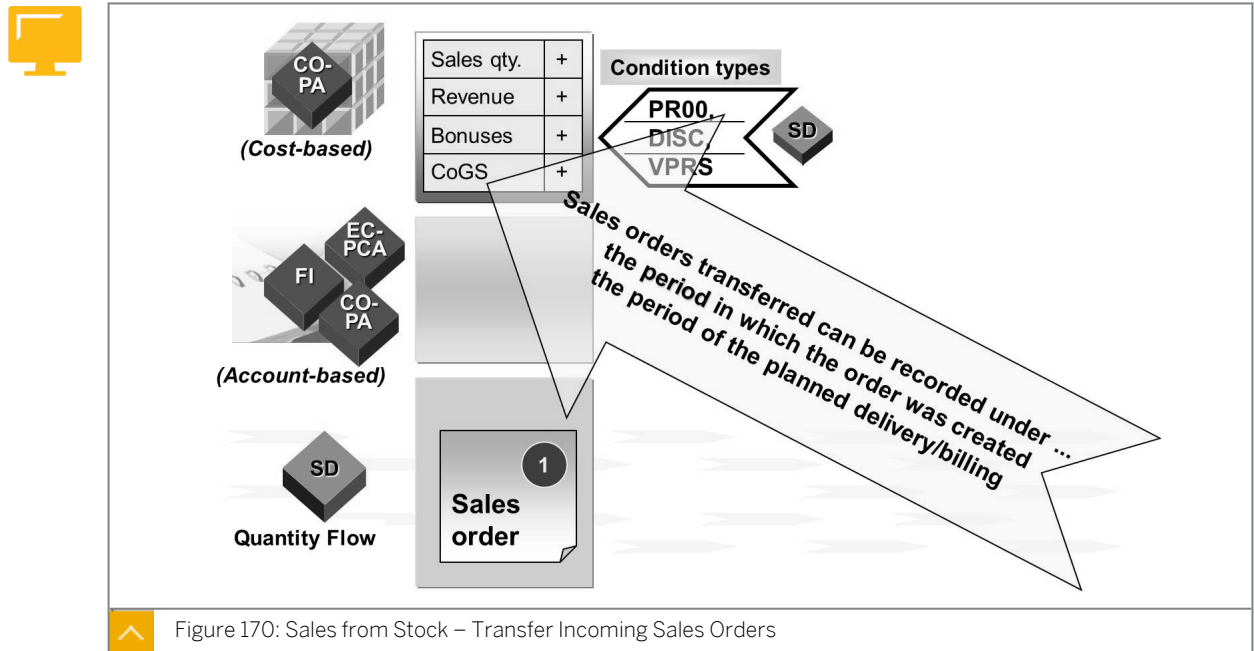


Figure 170: Sales from Stock – Transfer Incoming Sales Orders

You can value incoming sales orders as expected revenues and transfer them from sales order management to the costing-based CO-PA to obtain an early analysis of anticipated profits. As a result, you can create reports that reflect the course of actual profits and contribution margins based on billing documents. The reports also allow you to analyze these developments based on incoming orders.

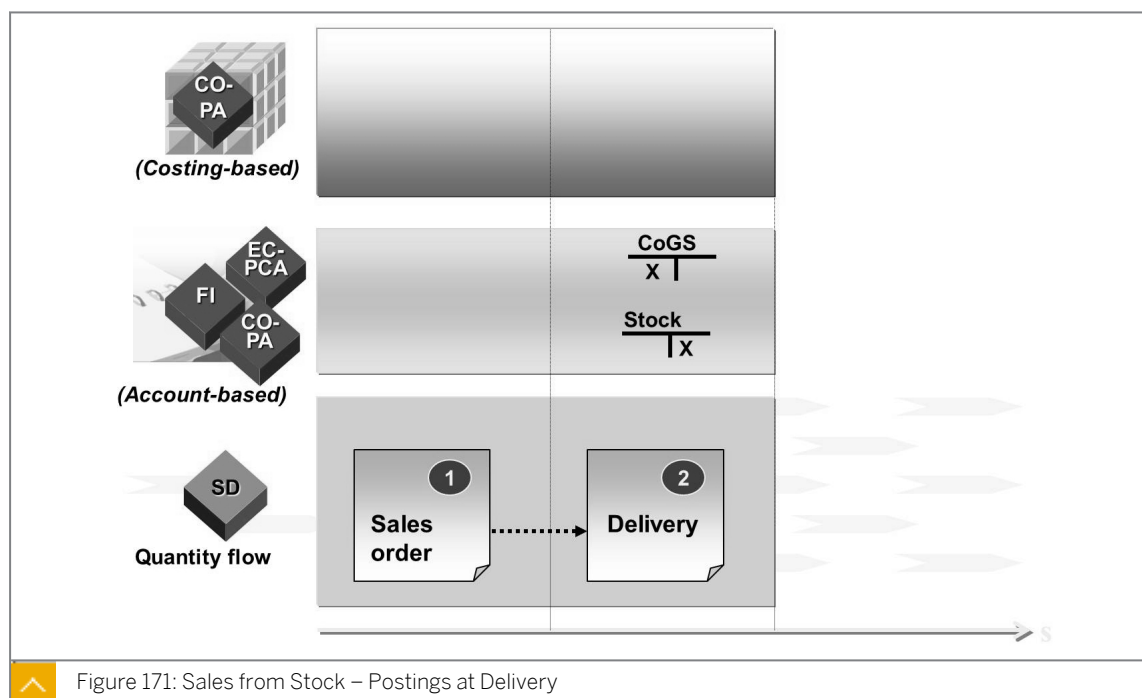
To analyze incoming orders, indicate record type A in the report. To analyze billing data, indicate record type F.

The options available to activate transfer of incoming orders are as follows:

- Activate the entry date
This option updates the orders under the same period in which they were created in the system.
- Transfer with the delivery date or the planned settlement date
This option displays the order in CO-PA in the period of planned delivery or planned settlement date and thus represents a billing-related update of the incoming sales orders.

If you activate CO-PA after sales order management is productive, you can subsequently post the existing sales orders for the current or past periods to CO-PA. Another available function allows you to identify the sales orders that are already assigned to a profitability segment, although the order is not yet active, and to transfer these orders to CO-PA.

Sales from Stock – Postings in Profitability Analysis



The goods issue is triggered by a delivery in sales order management. The goods issue affects the values in Materials Management (MM) and FI. Balance sheet and stock change postings are made in FI when the goods issue is posted.



Note:

The posting of the goods issue does not cause any data postings to the costing-based CO-PA. The cost of goods sold (COGS) is not transferred to CO-PA until the transfer of the billing document.

Sales from Stock – Billing

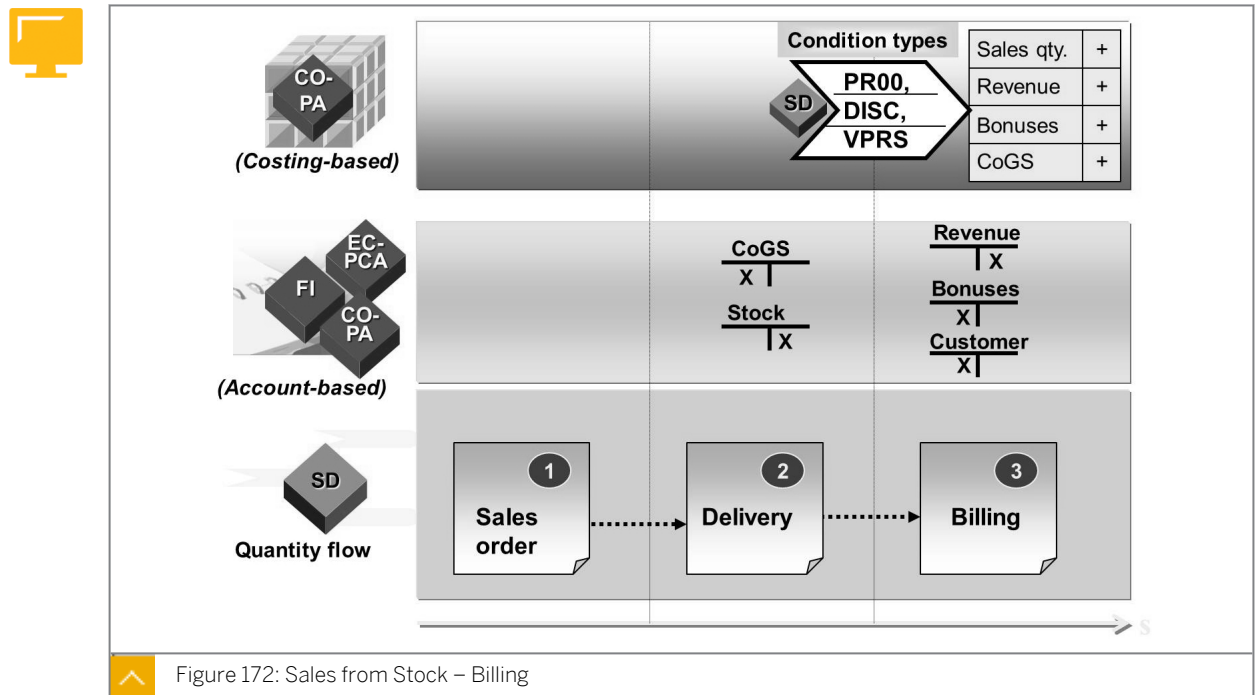


Figure 172: Sales from Stock – Billing

A business transaction is normally concluded in sales order management with the billing document. The billing data is automatically transferred to FI, where the revenue and receivable postings are made at the same time. When a billing document is created, sales order management calculates all sales revenues, sales deductions, and other values, such as the standard cost, by using pricing procedures, and stores these values in condition types. By assigning these condition types to the value fields in CO-PA, the system automatically transfers their values to CO-PA.

By valuating this billing data from sales order management using a material or sales order cost estimate, you can assign further anticipated costs and sales deductions to this transaction. The billing data is transferred to CO-PA with the record type F.

In addition, you can transfer the quantities from the quantity fields of sales order management, such as the sales quantity or gross weight, by assigning them to the corresponding quantity fields in CO-PA.

Transfer Billing Documents to CO-PA – In Detail

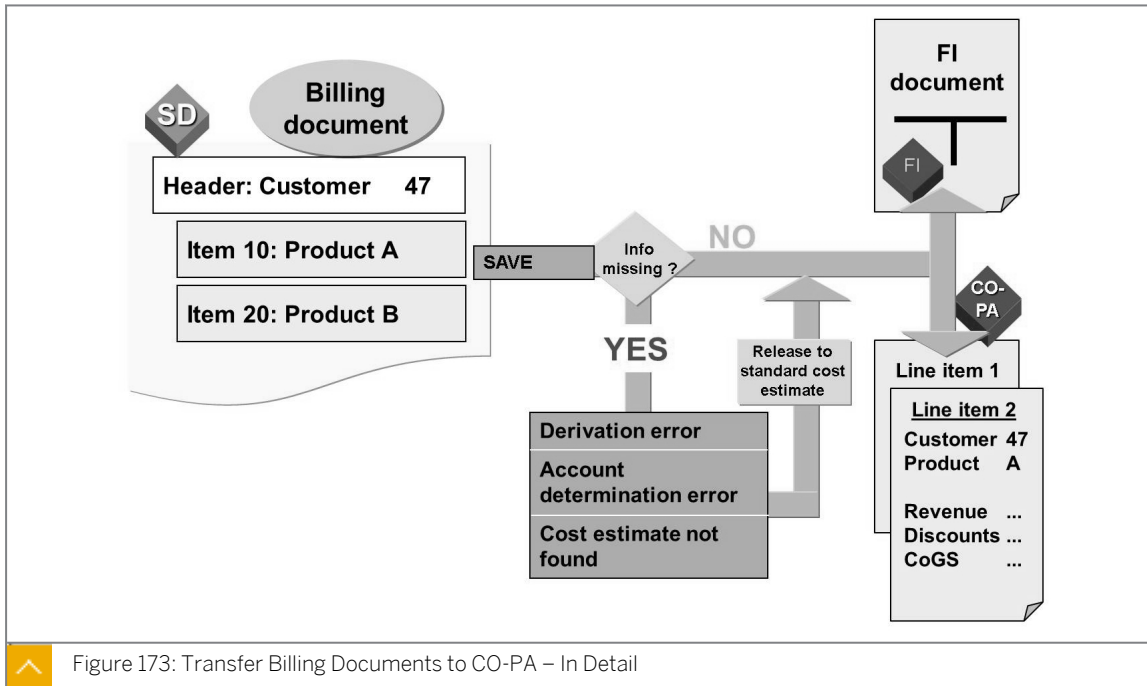


Figure 173: Transfer Billing Documents to CO-PA – In Detail

During billing, the system checks whether the data can be updated in FI and CO-PA. If one of the two postings cannot be executed due to an error, the other posting is not executed. This process ensures that the data is updated in parallel and CO-PA is reconciled with FI. If you choose *Release to Accounting* (VFEX3), you can post the invoice in FI and CO-PA after having removed the error.



Before Demonstration and Exercise, perform a goods movement. Use transaction code MB1c, movement type 501, plant 1000, storage location 0002, product p-100.



How to Create Postings in CO-PA from the Sales Process and Show the Configuration



Demonstrate the steps listed in the Execute the Sales Order Cycle exercise.

Condition Types



Sales Order Flow:

Transaction	Costing-Based		Account-Based	FI
Create Sales Order	Revenue Discounts COS	Record Type A		

Transaction	Costing-Based		Account-Based	FI
Post Goods Issue			DR COS	DR COS CR Inventory
Billing	Revenue Discounts COS	Record Type F	CR Revenue DR Discounts	CR Revenue DR Discount DR Customer AR

Explain the condition technique again, which is similar to the condition technique explained in the lesson on valuation. Notice that the setup is more elaborate here, because you are not posting the estimated values but the values that affect FI and Management Accounting. A generic overview of all the areas of the sales order management pricing configuration is sufficient.

Sales Order Type, that is, *OR* → *Pricing Procedure*, that is, *RV001A* → *Condition Type(s)*, that is, *PRO0 Price* → *Value Fields*, that is, *VV010*.

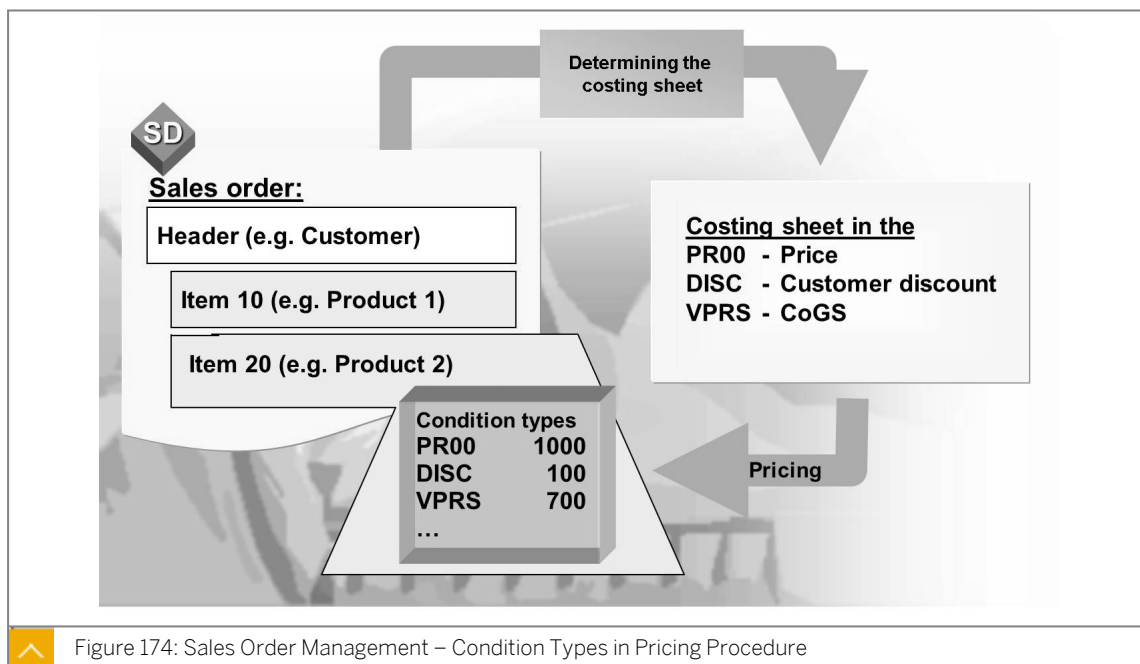
Account Key, that is, **ERL**.

GL Accounts, that is, **800000**.

If participants are interested in exploring the configuration in more detail, refer to the Sales and Distribution (SD) portion of the implementation guide. You will find the steps under Basic Functions.

Remind participants that product cost information can be retrieved when you transfer sales order management documents. Highlight the differences between the condition type, VPRS, and other COGS or cost of goods manufactured (COGM) fields that are populated through valuation. VPRS can be reconciled to FI. VPRS is the legal cost of sales, and COGM or COGS may refer to a future or current standard cost estimate.

To familiarize yourself with the concept of customer agreements, there is an excellent Internet Demo and Evaluation System (IDES) demo script on this topic that you can execute in the training system.



A pricing procedure defines the conditions that are permitted for a particular document and the sequence in which the system takes these conditions into account during pricing.

In addition, you assign the pricing procedures to the transactions by defining the following dependencies:

- Customer
- Controlling area
- Profit center
- Sales organization

In the pricing procedure, you define the condition types to be taken into account and their sequence. During pricing, the SAP system automatically determines the pricing procedure for a business transaction and it takes into account the condition types contained in the pricing procedure.

Condition Types

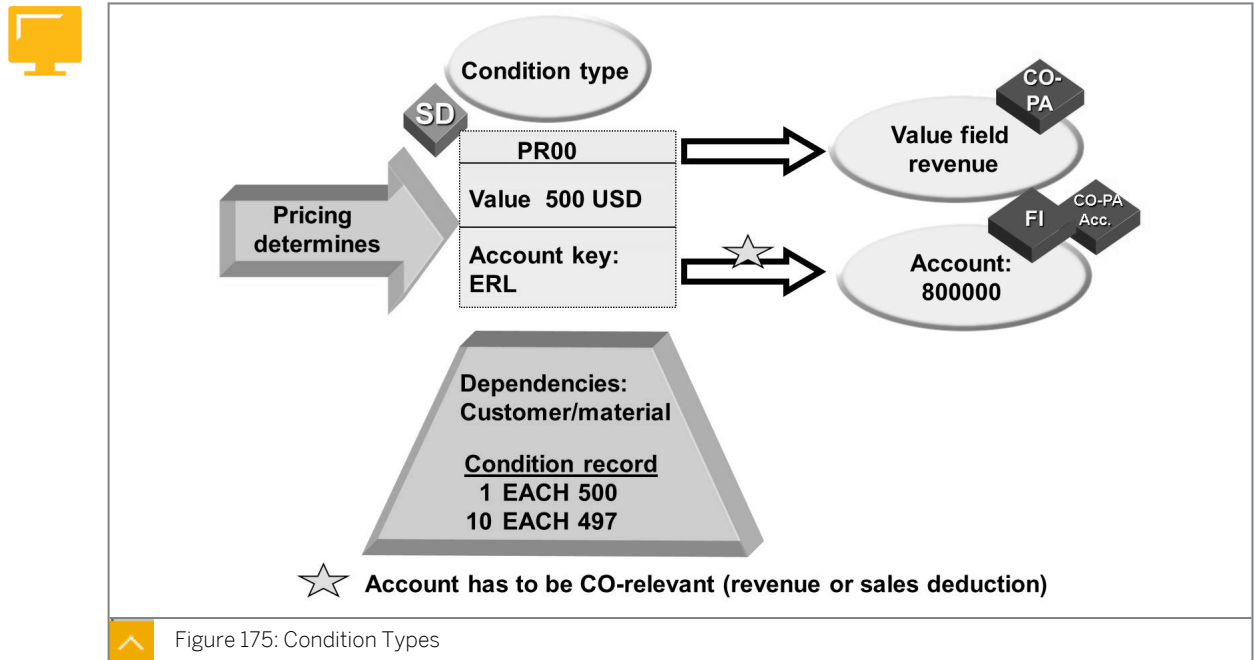


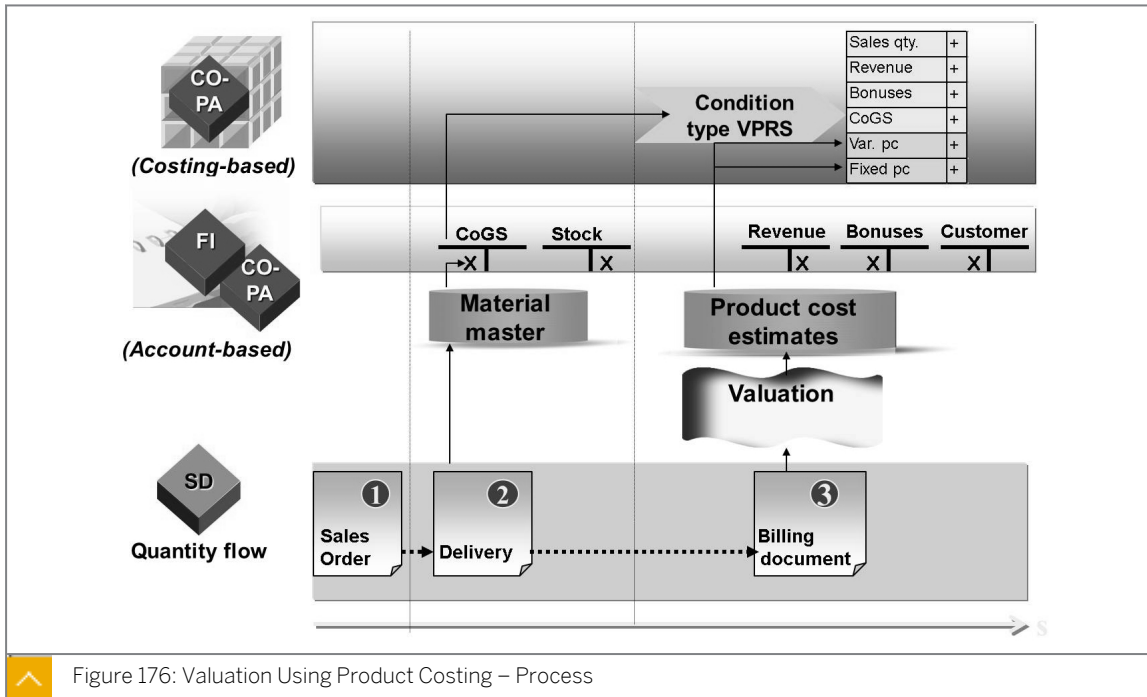
Figure 175: Condition Types

A condition type is a representation of some aspect of your daily pricing activities in the system. For example, you can define a different condition type for each type of price, discount, or surcharge that occurs in your business transactions.

A condition table defines the combination of fields that identify an individual condition record. The system stores the specific condition data that you enter in the system as condition records. For example, when you enter the price for a product or a special discount for a good customer, you create individual condition records.

An access sequence is a search strategy that the system uses to find valid data for a particular condition type. The access sequence determines the sequence in which the system searches for data and consists of one or more accesses. The access sequence establishes which condition records have priority. The access sequence tells the system where to look first, second, and so on, until the system finds a valid condition record. You specify an access sequence for each condition type for which you create condition records.

Valuation Using Product Costing



You can transfer the material value at the time of goods issue through the condition VPRS.

The condition type VPRS transfers the cost of sales posted at the time of goods issue to CO-PA. If the standard price changes between the time of the goods issue and the billing date, VPRS saves the material value at the time of goods issue and guarantees that the cost of sales can be reconciled with FI.

Valuation using material cost estimates enables you to determine the cost of goods manufactured for the product sold whenever a sales document is transferred to CO-PA. For example, you can find the variable and fixed cost components for the product sold and compare them with the revenues and sales deductions transferred from the billing document for the sales transaction. You can value your billing items using the date of goods issue. Customizing is performed in the costing key.

The Transfer of Billing Documents

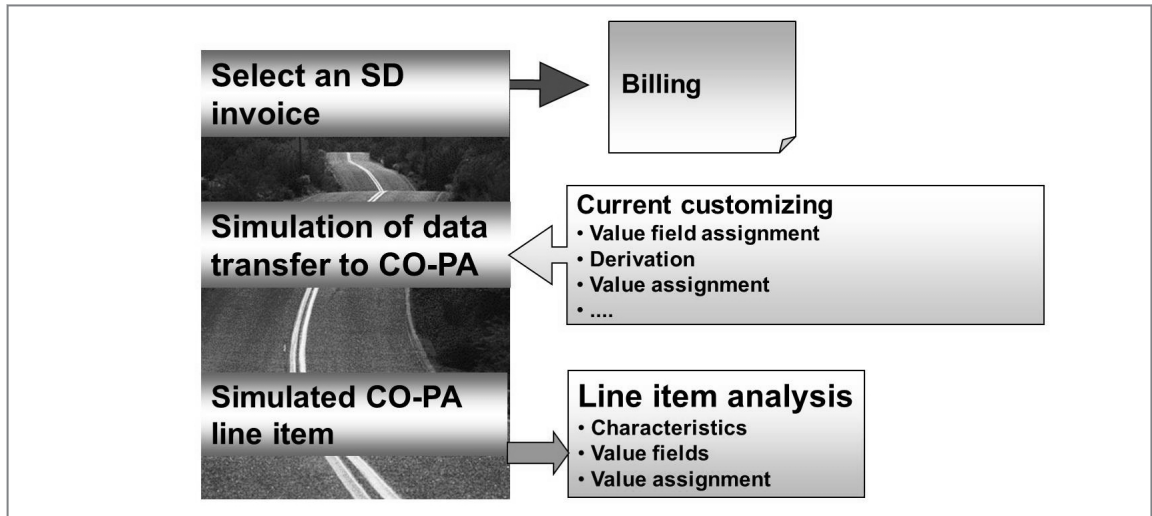


Figure 177: Simulation of the Transfer of Billing Document Data to CO-PA

In the activity, Simulating the Transfer of Documents from Billing, you have the option of simulating the transfer of billing document data to CO-PA. Simulation occurs on the basis of the Customizing settings that are valid at the time simulation is executed. You can view the characteristics and value fields of the line item to be written to CO-PA.

Valuation analysis allows you to perform an analysis of the valuation strategy, which is used for valuating the billing document data.

You can also restart the simulation of document transfers for the billing documents that have been transferred. Performing this simulation does not post data to CO-PA or other modules.

Reconciliation Report FI or SD and CO-PA



Value field/cond. type/account	Crcy	Value in CO-PA	Value in SD	Variance CO-PA/SD		
		CO-PA value	SD value	FI value	Delta CO-PA/SD	Delta SD/FI
Revenue	DEM	51.000,00	51.000,00	51.000,00-	0,00	0,00
PR00			51.000,00	51.000,00-		0,00
0000800000			51.000,00	51.000,00-		0,00
Cash discount	DEM	1.774,80	1.774,80		0,00	
SKT0 (St)			1.774,80			
Accrued freight	DEM	258,54-	0,00		258,54-	
Cost of goods sold	DEM	12.927,00	12.927,00	12.927,00	0,00	0,00
VPRS (6)			12.927,00	12.927,00		0,00
0000893015 GI			12.927,00	12.927,00		0,00
Other condition types						
RL00 (St) DEM			510,00-			

Figure 178: Reconciliation Report FI or SD and CO-PA

In sales order management, invoice values are assigned to condition types. In accounting, these values are posted to accounts, and in CO-PA, they are positioned in value fields. The

CO-PA reconciliation report contains a list of corresponding balances for condition types, profit and loss accounts, and value fields.

The reconciliation report offers you the following fundamental functions:

- Using posted data, you can use post analysis to check and understand the assignments of the sales order management conditions in Customizing to the accounts in FI and to the value fields in CO-PA. You can also check the flow of values resulting from the assignments.
- You can analyze the differences between CO-PA and Sales and Distribution (SD) as well as between CO-PA and FI to locate their origin. This analysis is useful for the reconciliation of FI with CO-PA. This report can also be used to check the flow of values from the order or the project settlement. As shown in the example given in the figure, the Delta CO-PA/SD is caused by the fact that accrued freight is calculated in CO-PA through valuation and, therefore, has no SD counterpart.

The Transfer of Customer Agreements

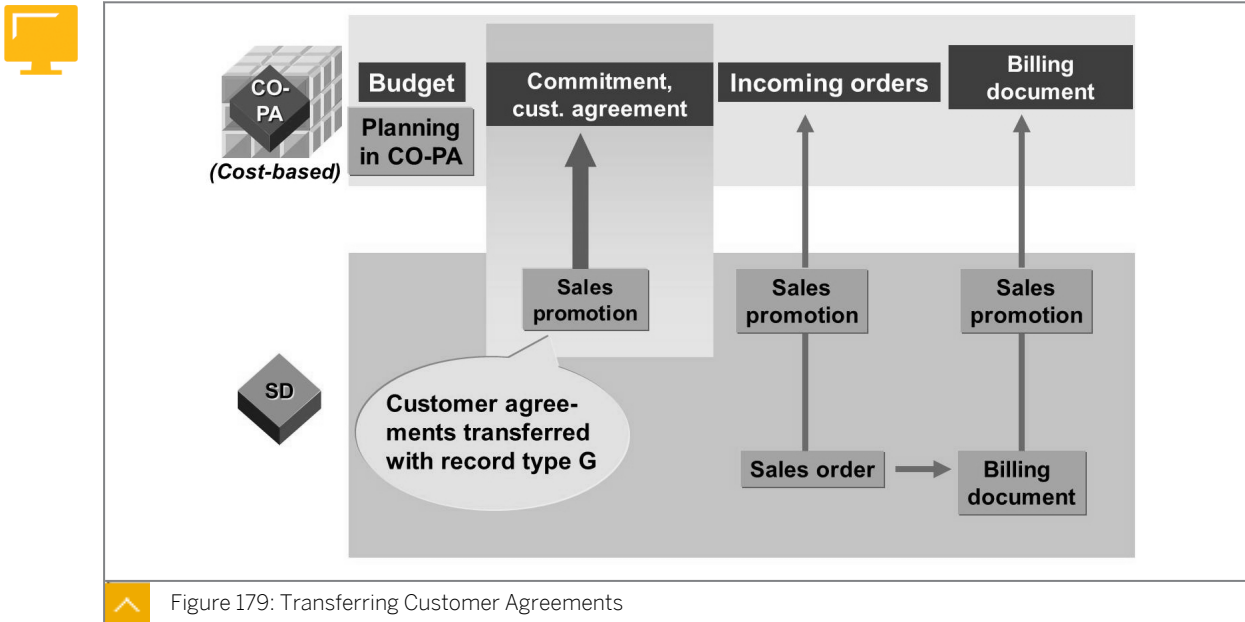


Figure 179: Transferring Customer Agreements

During market segment planning and sales and profit planning, you can create budgets for sales support measures, such as sales promotions and related special offer discounts. These budgets are then used in sales order management when conditions, such as special offer discounts, are maintained for the customer agreement.

You can monitor the budgeting process from the assignments in the customer agreement to the billing document in CO-PA because the budget assignments are transferred to CO-PA when you maintain the conditions.

You can monitor the budget assignments by performing variance analyses of the planned budget and the available budget. These analyses allow you to monitor sales promotions extensively right from the early stages of CO-PA.

The condition pass on the following information to CO-PA:

- When the condition record is created as part of the sales agreement
- When the sales order is created
- When the billing document is created

This passing of information allows for accurate reporting through all the stages of the process.

Unit 10

Exercise 23




Execute the Sales Order Cycle

Business Example

Your company is now ready to test the mapping of the SD condition types to the CO-PA value fields and the effects on valuation and derivation.

Review the condition types mapped to the value fields in your operating concern. Ensure that both the quantities and values have been mapped to CO-PA so that the corresponding value fields are populated when a sales order is posted.



Hint:

The general sales order processing is executed as follows:

1. Create a sales order. At this point, the system will determine the price, cost, discount, and other values based on the SD condition types configured.
2. After you save the order, the system assigns a sales order number.
3. The next step is the order delivery process. It includes the tasks to pick the materials ordered, post the goods issue, and create a delivery document for the actual delivery of the product. After delivery, a billing document is created. The order processing from a SD point of view is then completed.

The condition technique used in the SD component determines the prices and estimated costs (statistical conditions) for the order.

1. To which value field is the *PRO0* (Price) condition type mapped?
2. To which value field is the SD quantity field, *FKIMG*, mapped?
3. To test your configuration settings, create a standard sales order for your customer using the following data:

Field Name or Data Type	Value
<i>Order Type</i>	OR
<i>Sales organization</i>	1000
<i>Distribution Channel</i>	10
<i>Division</i>	00
<i>Sold-To party</i>	T-CO05A##
<i>Ship-To party</i>	T-CO05A##

Field Name or Data Type	Value
<i>Material</i>	P-100
<i>Qty</i>	1

4. View the sales order item you have just generated in CO-PA. Which record type do you use?
What value is entered in the *Revenue* field?
5. Create the delivery. The delivery process includes the picking process and goods issue for your sales order.



Note:

We must increase the selection data for our delivery to today's date + one month or items will not be selected for delivery.

6. View the financial accounting documents you just created.
7. Create the billing document using the *Delivery* document number.
8. In CO-PA, display the line item for your billing document. Enter the customer **T-CO05A##** and the product **P-100** when displaying line items.
What is the total value of revenue?
Why do two lines appear for the line item you have displayed?
From the line item report, how do you drill down to the sales order that you originally created?




Execute the Sales Order Cycle

Business Example

Your company is now ready to test the mapping of the SD condition types to the CO-PA value fields and the effects on valuation and derivation.

Review the condition types mapped to the value fields in your operating concern. Ensure that both the quantities and values have been mapped to CO-PA so that the corresponding value fields are populated when a sales order is posted.



Hint:

The general sales order processing is executed as follows:

1. Create a sales order. At this point, the system will determine the price, cost, discount, and other values based on the SD condition types configured.
2. After you save the order, the system assigns a sales order number.
3. The next step is the order delivery process. It includes the tasks to pick the materials ordered, post the goods issue, and create a delivery document for the actual delivery of the product. After delivery, a billing document is created. The order processing from a SD point of view is then completed.

The condition technique used in the SD component determines the prices and estimated costs (statistical conditions) for the order.



1. To which value field is the *PRO0* (Price) condition type mapped?
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Flows of Actual Values* → *Transfer of Billing Documents* → *Assign Value Fields*.
 - b) In the *Choose Activity* dialog box, double-click *Maintain Assignment of SD Conditions to CO-PA Value Fields*.



Hint:

If prompted, enter **IDEA** in the *Operating concern* field, select the *costing-based* radio button, and choose *Continue*.

- c) On the *Change View "CO-PA: Assignment of SD Conditions to Value Fields"*: *Over* screen, choose the *Position* pushbutton.

- d) In the *Another Entry* dialog box, enter **PROO** in the *Condition Type* field and choose *Continue*.
The *PROO* condition type is mapped to the *VV010 Revenue value* field.
 - e) Choose  (*Back*) to return to the Customizing screen.
2. To which value field is the SD quantity field, *FKIMG*, mapped?
- a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Flows of Actual Values* → *Transfer of Billing Documents* → *Assign Quantity Fields*.
 - b) On the *Change View "Assign SD Qty. Fields-> CO-PA Qty. Fields": Overview* screen, check that *FKIMG* is mapped to the *VVIQT Invoiced quantity* value field.
 - c) Choose  (*Back*) twice to return to the *SAP Easy Access* screen.
3. To test your configuration settings, create a standard sales order for your customer using the following data:

Field Name or Data Type	Value
<i>Order Type</i>	OR
<i>Sales organization</i>	1000
<i>Distribution Channel</i>	10
<i>Division</i>	00
<i>Sold-To party</i>	T-CO05A##
<i>Ship-To party</i>	T-CO05A##
<i>Material</i>	P-100
<i>Qty</i>	1



- a) On the *SAP Easy Access* screen, choose *Logistics* → *Sales and Distribution* → *Sales* → *Order* → *Create (VA01)*.
- b) On the *Create Sales Order: Initial* screen, enter the following data:

Field Name or Data Type	Value
<i>Order Type</i>	OR
<i>Sales Organization</i>	1000
<i>Distribution Channel</i>	10
<i>Division</i>	00


- c) Choose *Enter*.
- d) On the *Create Standard Order: Overview* screen, enter the following data:

Field Name or Data Type	Value
<i>Sold-To Party</i>	T-CO05A##
<i>Ship-To Party</i>	T-CO05A##

Field Name or Data Type	Value
<i>PO Number</i>	Group##
<i>PO date</i>	Current date
<i>Material</i>	P-100
<i>Order Quantity</i>	1

- e) Choose  (*Item conditions*) to view the value for the condition types *PROO* and *VPRS*.
 - f) Choose *Save* to post your sales order.
 - g) Document your sales order number.
 - h) Choose  (*Back*) to return to the *SAP Easy Access* screen.
4. View the sales order item you have just generated in CO-PA. Which record type do you use?

What value is entered in the *Revenue* field?

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Item List* → *Actual* (KE24).
- b) On the *Display Actual Line Items* screen, enter your order number in the *Sales order* field and choose  (*Execute*).
If you receive a warning that you have not sufficiently restricted the selection criteria, choose *Enter*.



Hint:

If you do not have your sales order number, you can open another session and enter the transaction code `VA03` to view your order number.


The CO-PA document was posted under the record type *A* (incoming sales orders).





Note:

There are two line items because our operating concern is configured to post in *Operating Concern currency* (**B0**) and *Company Code currency* (**10**).

- c) Double-click the first line entry.
- d) On the *Characteristics* tab page, you will see that *Derivation* occurred since we did not provide all of this information on the *Sales Order*.
- e) On the *Value fields* tab page, you will see the *Revenue* is 2600. This value field is populated from the *PROO* condition. You can also see that *Valuation* occurred.

 **Note:**
 Because you performed *Valuation*, you have the material cost twice. Once from the *VPRS* condition that was mapped to the *Cost of Goods Sold* value field and from the *Cost Components* that were mapped to the various *Value Fields* from the *Material Cost Estimate*. This valuation gives you flexibility when writing reports.


- f) Choose  (*Back*) to return to the *SAP Easy Access* screen.
5. Create the delivery. The delivery process includes the picking process and goods issue for your sales order.

 **Note:**
 We must increase the selection data for our delivery to today's date + one month or items will not be selected for delivery.

- a) On the *SAP Easy Access* screen, choose *Logistics* → *Sales and Distribution* → *Sales* → *Order* → *Subsequent functions* → *Outbound Delivery* (VL01N).
- b) On the *Create Outbound Delivery with Order Reference* screen, enter the following data:

Field Name or Data Type	Value
<i>Shipping point</i>	1000
<i>Selection date</i>	Current date + 1 month
<i>Order</i>	Your order number

Choose *Enter*.


 **Hint:**
 If you receive an error, make sure you choose the selection date as today PLUS one month.

- c) On the *Delivery Create: Overview* screen, choose the *Item Overview* tab page, enter 0002 in the *SLoc* column.
- d) Choose *Subsequent Functions* → *Create Transfer Order*. In the *End Document Processing* dialog box, choose the *Yes* pushbutton to save the data.
- e) On the *Create Transfer Order for Delivery Note: Initial* screen, enter the following data:



Field Name or Data Type	Value
<i>Warehouse Number</i>	10
<i>Delivery</i>	Your delivery number
<i>Activate Item</i>	Select

Field Name or Data Type	Value
<i>Foreground/Backgrnd</i>	<i>System-Guided</i>
<i>Adopt Pick Quantity</i>	2

Choose *Enter*.



Note:
Entering *Adopt Pick Quantity* of 2 will create the *Transfer Order* and *Post the Goods Issue* at the same time.

- f) Save the data.
The system creates the transfer order and posts the goods issue.
 - g) Choose  (*Back*) to return to the *SAP Easy Access* screen.
6. View the financial accounting documents you just created.
- a) On the *SAP Easy Access* screen, choose *Logistics* → *Sales and Distribution* → *Sales* → *Order* → *Display* (VA03).
 - b) Your sales order number should appear by default. If not, enter it and choose *Environment* → *Display document flow*.
 - c) On the *Document Flow* screen, choose *GD goods issue: delvy* and choose the *Display document* pushbutton.
The material document appears.
 - d) On the *Display Material Document: Overview* screen, choose the *Accounting Documents* pushbutton.
The *List of Documents in Accounting* dialog box appears. Because only account-based CO-PA receives a posting at the time of goods issue, you see a *Controlling Document* but you will not see a *Profitability Analysis* document.
 - e) Double-click the *Controlling Document* to view the account-based CO-PA posting.
 - f) On the *Display Actual Cost Documents* screen, choose +.
You see the *Cost of goods sold* posting, but not the credit to inventory because CO-PA only receives P&L postings, not the balance sheet.
 - g) Use /N to return to the *SAP Easy Access* screen.
7. Create the billing document using the *Delivery* document number.
- a) On the *SAP Easy Access* screen, choose *Logistics* → *Sales and Distribution* → *Billing* → *Billing Document* → *Create* (VF01).
 - b) Your delivery number appears on the *Create Billing Document* screen. To create the billing document, choose *Save*.
Document your billing document number.
 - c) Choose  (*Back*) to return to the *SAP Easy Access* screen.

8. In CO-PA, display the line item for your billing document. Enter the customer **T-CO05A##** and the product **P-100** when displaying line items.


What is the total value of revenue?

Why do two lines appear for the line item you have displayed?


From the line item report, how do you drill down to the sales order that you originally created?

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Item List* → *Actual* (KE24).
- b) On the *Display Actual Line Items: Initial* screen, enter the following data:

Field Name or Data Type	Value
<i>Record type</i>	F
<i>Period/year</i>	Current date
<i>Entered by</i>	AC605-##
<i>Customer</i>	T-CO05A##
<i>Product</i>	P-100

Choose  (*Execute*).

As a result of the currency settings for the operating concern IDEA, both the operating concern currency and the company code currency are stored. Both of them are displayed here.

- c) Double-click the first line item in *Operating Concern Currency* (**B0**).
To see the value for *Revenue*, choose the *Value fields* tab page.
- d) On the *Display Line Items* screen, you also see *Valuation* occurred on the *Value fields* tab page.
- e) On the *Origin data* tab page, you see that the system tracked the date of goods issue to determine the appropriate cost estimate based on the costing key in your valuation configuration.
- f) To drill down to the sales order originally created, choose *Environment* → *Integration*. In the *Integration: Selection of Transaction* dialog box, select *Display Sales Order* and choose *Enter*.
The sales order appears.
- g) Choose  (*Back*) to return to the *SAP Easy Access* screen.

Unit 10

Exercise 24



Analyze the Value Flow

Business Example

Your company is requesting that you reconcile CO-PA and SD.

You want to compare the actual data from the profitability analysis with the values posted in FI.



Hint:

You can use the CO-PA reconciliation report to compare the actual data from CO-PA with the corresponding values posted in FI.

This comparison enables you to see the flow of values to CO-PA when invoicing takes place. It also shows the discrepancies between the applications and allows you to analyze the discrepancies.

In sales order management, billing document values are assigned to the condition type. In FI, these values are posted to accounts, and in CO-PA, these values are posted to value fields. The reconciliation report contains a list of the corresponding balances for condition types, P&L accounts, and value fields.

1. Use the *Analyze Value Flows* function to compare SD, FI, and costing-based CO-PA.

On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Tools* → *Analyze Value Flows* → *Check Value Flow in Billing Document Transfer*.

Field Name or Data Type	Value
<i>Company Code</i>	1000
<i>Currency Type</i>	10
<i>Billing document</i>	Your billing document number

Take a look at the legend. Which icon is used to represent the value fields?

Which color is used to show the discrepancies between FI and CO-PA?

Why is there no corresponding value for *Accrued freight* in FI?

Unit 10

Solution 24



Analyze the Value Flow

Business Example

Your company is requesting that you reconcile CO-PA and SD.

You want to compare the actual data from the profitability analysis with the values posted in FI.



Hint:

You can use the CO-PA reconciliation report to compare the actual data from CO-PA with the corresponding values posted in FI.

This comparison enables you to see the flow of values to CO-PA when invoicing takes place. It also shows the discrepancies between the applications and allows you to analyze the discrepancies.

In sales order management, billing document values are assigned to the condition type. In FI, these values are posted to accounts, and in CO-PA, these values are posted to value fields. The reconciliation report contains a list of the corresponding balances for condition types, P&L accounts, and value fields.

1. Use the *Analyze Value Flows* function to compare SD, FI, and costing-based CO-PA. On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Tools* → *Analyze Value Flows* → *Check Value Flow in Billing Document Transfer*.

Field Name or Data Type	Value
<i>Company Code</i>	1000
<i>Currency Type</i>	10
<i>Billing document</i>	Your billing document number

Take a look at the legend. Which icon is used to represent the value fields?

Which color is used to show the discrepancies between FI and CO-PA?

Why is there no corresponding value for *Accrued freight* in FI?





- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Tools* → *Analyze Value Flows* → *Check Value Flow in Billing Document Transfer*.
- b) On the *Value Flow SD->FI/CO-PA* screen, enter the following data:

Field Name or Data Type	Value
<i>Company Code</i>	1000

Field Name or Data Type	Value
<i>Currency type</i>	10
<i>Billing document</i>	Your billing document number
<i>Display FI values</i>	Select
<i>Display profit center values</i>	Select

**Note:**

If you do not have your billing document number, open another session and use transaction code VF03 to view your billing document number.

- c) Choose  (Execute).
- d) On the *Comparison CO-PA <-> SD <-> FI: Balances* screen, choose  (Status) to view the *Legend* dialog box. Choose the *Continue* pushbutton.
- e) Why is the *Accrued freight* highlighted in *Delta CO-PA/SD*?
The *Accrued Freight* costs were calculated in a CO-PA valuation strategy by using a costing sheet. Therefore, they are not in the billing document, FI, or EC-PCA.
- f) Double-click the highlighted value to see the *List of Invoices Containing Errors* (not really errors, but discrepancies).
- g) To drill down to the actual billing document, double-click the *Billing Document number*.
Choose  (Accounting) to go to the FI document.
- h) Choose  (Back) to return to the *SAP Easy Access* screen.



LESSON SUMMARY

You should now be able to:

- Evaluate the integration with sales order management



Processing Cost Allocations

LESSON OVERVIEW

This lesson explains the transfer and allocation of costs.



Transfer of Overhead

Explain the business concept behind assessing the cost center and process costs in Profitability Analysis (CO-PA). To allow full analysis of the costs that have arisen in Overhead Cost Controlling (CO-OM), you can periodically transfer the overhead costs that are not directly attributable to the cost centers or business processes to CO-PA. These costs are sometimes referred to as below the line expenses or Selling and General (SG) expenses.

These costs can be allocated to any market segment or profitability segment and, as a result, to any level of the contribution margin hierarchies. This function allows you to transfer the sales, marketing, and administration costs as well as the variances in service cost centers or production cost centers to CO-PA. Emphasize the fact that CO-PA uses the same assessment tool as CO-OM.

Remind the participants that the product cost information can be retrieved when transferring sales order management documents. Highlight the differences between the condition type VPRS and other cost of goods sold (COGS) or cost of goods manufactured (COGM) fields that are populated through valuation. VPRS can be reconciled to Financial Accounting (FI). The legal cost of sales and COGM or COGS may indicate a future or current standard cost estimate.

Allocating Processes

Describe the process of activity allocations. Mention that the process starts from the Cost Center Accounting (CO-CCA) screens. On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Actual Posting* → *Activity Allocation* → *Enter* → *Controlling Area 1000*. Comment on the options under *screen variant* → *profit segment/cost ctr*. After the screen changes to show this screen variant, direct your attention to the profitability segment arrow that appears on the receiver side.

Business Example

Your corporate operations department wants to allocate costs across the manufacturing plants and the distribution centers in Canada, the United States, and Japan. They can track the services provided at the division level and ensure that the logistics costs are included in the contribution margin reports. As a result, you need to execute allocations and settlements of overhead costs. For this reason, you require the following knowledge:

- How to transfer and allocate costs



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Allocate overhead costs to CO-PA
- Perform a cost center assessment
- Allocate Activity Costs

The Transfer of Overhead Costs – Overview

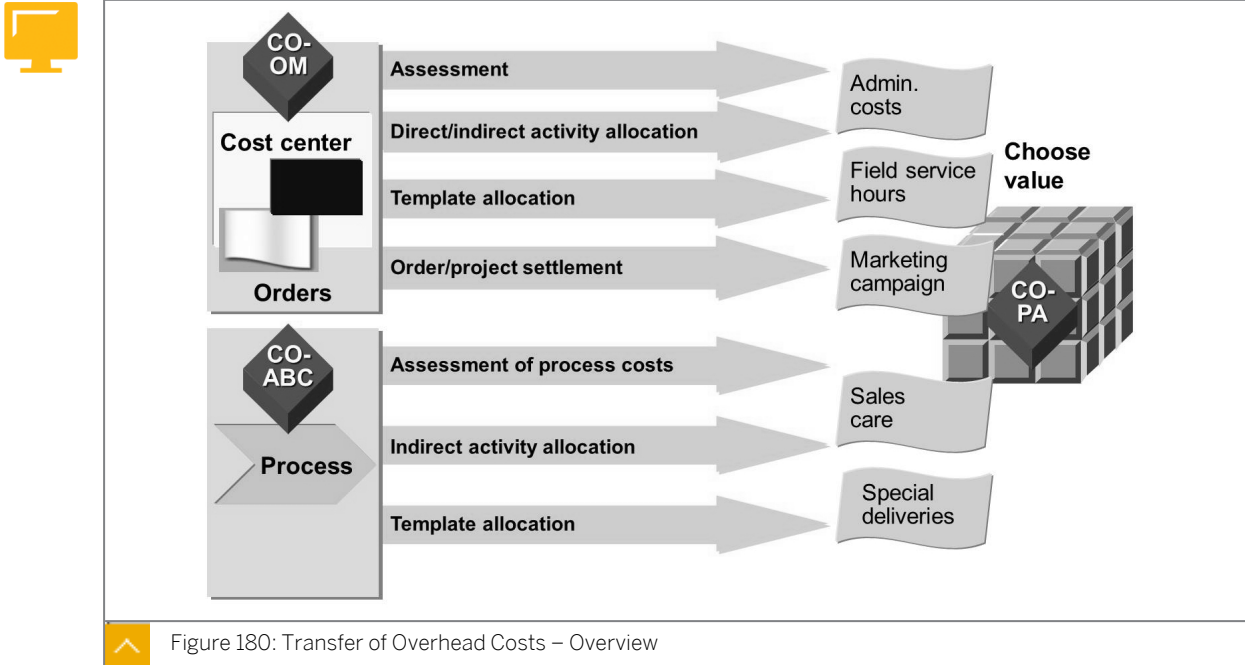


Figure 180: Transfer of Overhead Costs – Overview

All the costs incurred in Overhead Cost Controlling (CO-OM) can be displayed in CO-PA by transferring the particular overhead costs for the cost centers and the business processes that are not allocated to the inventory. You can transfer the overhead cost by means of periodic assessment.

In addition, you can execute a direct or indirect allocation of internal activities in CO-PA for cost centers and business processes. Along with the sender (cost center or process) and the receiver (profitability segment), you enter the quantity of the activity performed and value it with the planned price of the activity type. The amount arrived at is credited to the sender and debited to the profitability segment receiving the quantity. Therefore, a transport activity can be directly posted to particular customers without being posted to a cost center or an order.

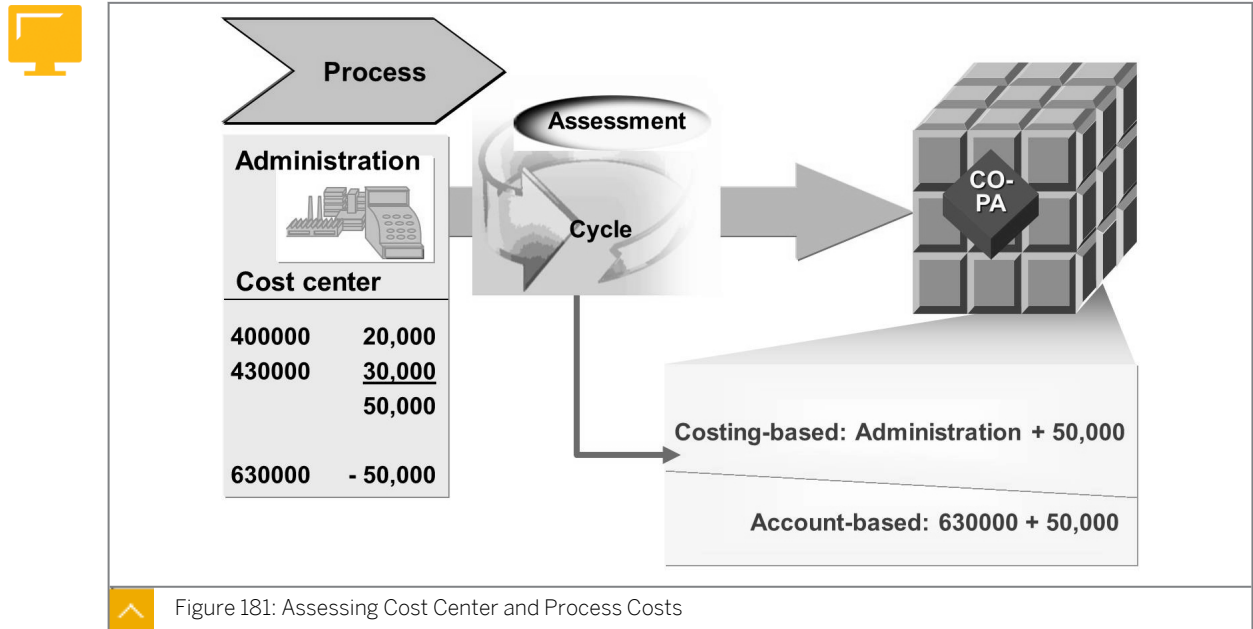
If you use the cost component split in Cost Center Accounting (CO-CCA) or activity-based costing for price calculation, you can update the prices divided into cost components during allocations to CO-PA.

Transfer of Overhead Costs – Time Basis

Credit Object	Which Time Basis
Cost Center Assessment Cost Center	Periodical costs
Direct activity allocation	Cost center Quantity Price ad hoc
Indirect activity allocation	Cost center Quantity Price periodic
Process assessment	Process costs periodic

Credit Object	Which Time Basis
Template allocation	Process Quantity Price periodic

Cost Center and Process Costs Allocation



The Overhead Cost Controlling Activity-Based Costing (CO-OM-ABC) application component provides an alternative form of overhead control that is useful when indirect activities generate a large share of the value added to products. It uses cost drivers to allocate the internal activities to the overhead processes, which can then be transferred to profitability segments through process assessment function. Reference values for the transfer can be quantities and values posted in CO-PA or additional cost driver information, such as the number of sales orders created.

The function for assessing cost center costs allows you to transfer the variances in production cost centers as well as the costs in sales and administrative cost centers to CO-PA.

The cost centers and processes are credited by the amount allocated. As a result, all costs can be allocated one time. You assess the cost center and process costs in the same way as in CO-OM; by defining cycles and executing them on a periodic basis. These cycles contain the control information for the assessment and can be maintained in Customizing.

Defining and Executing an Assessment Cycle

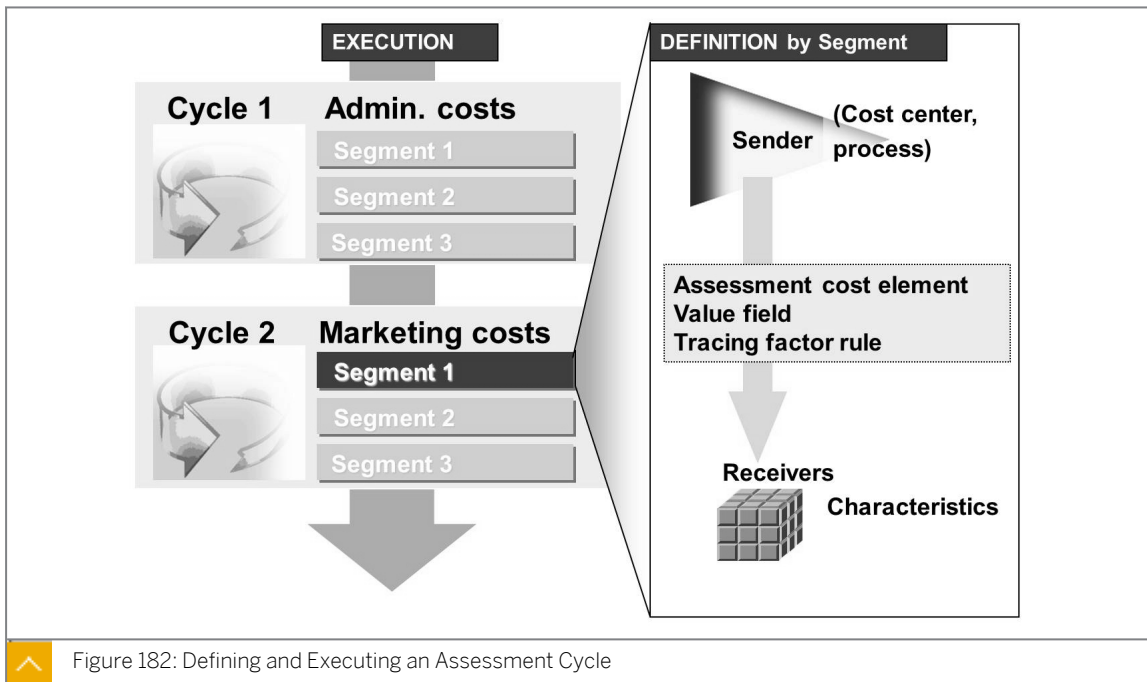


Figure 182: Defining and Executing an Assessment Cycle

A cycle controls how an assessment is processed. It contains all the relevant information about the senders, receivers, sender rules, receiver rules, and tracing factors. Each cycle can contain a number of segments. A segment describes a combination of senders and receivers that are to be processed together.

In theory, you could create one cycle for transferring all the overhead costs to CO-PA. However, for performance and technical reasons, it is better to create several cycles and process them sequentially in the order necessary.

Divide your assessment into separate cycles to allocate the different areas of your organization to CO-PA at different times. This division also has the advantage that you only need to repeat the affected cycles when errors or changes occur.

A cycle can contain the sender cost centers or processes from one controlling area and use the values from either the costing-based CO-PA or account-based CO-PA as tracing factors.

The sender cost centers or processes are credited in the assessment cost element specified in the segment of the cycle.

The receiver is defined by a combination of characteristic values from a profitability segment. These values are debited to the profitability segment using an assessment cost element, such as account-based CO-PA, and value fields, such as the costing-based CO-PA, which were specified by you for each segment of the cycle.

Allocating Processes

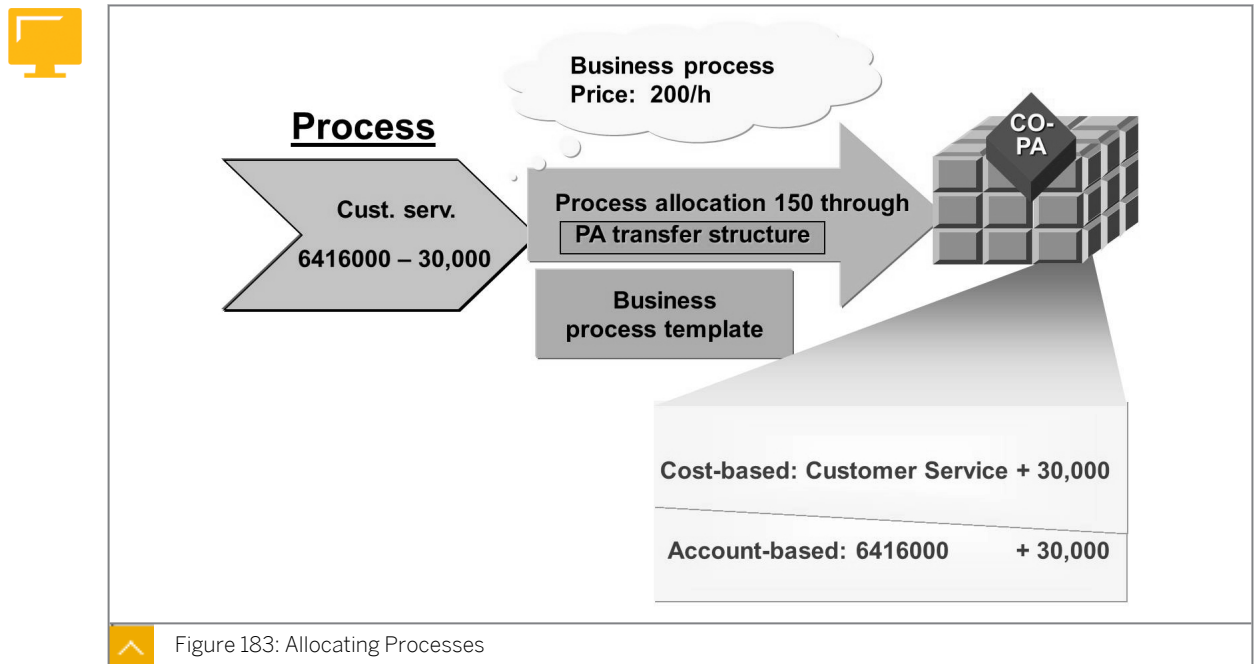


Figure 183: Allocating Processes

You can allocate the process costs incurred for individual profitability segments, such as a sales organization, to CO-PA. In this case, you transfer the valued process quantities and not the activity type quantities as with cost centers.

When you create the process allocation, you can specify a profitability segment as the receiver by selecting the *Profit segment* field. When you press ENTER, the system displays a dialog box in which you can specify the characteristic values to which you want to allocate the process.

The process quantity is then valued using the planned price for that process. This value is credited to the cost center as actual data using the allocation cost element that was assigned to the relevant business process.

In account-based CO-PA, the costs are debited with the same allocation cost element. In the costing-based CO-PA, assign this allocation cost element to the required value field in the PA transfer structure CO.

In dynamic process allocation, you can determine which profitability segment used the process and, therefore, should receive the process costs. In this case, you can use a process template to define the formulas and functions that select the cost drivers from CO-PA or other sources to assign the costs most accurately to their cause.

In Customizing, you can assign this process template to characteristics that are used to select the cost drivers. Then assign update characteristics, which ultimately determine the profitability segments to which the business process costs are allocated.



How to Create and Execute an Assessment Cycle



Demonstrate the steps listed in the Create and Execute an Assessment Cycle exercise.

Unit 10

Exercise 25



Create and Execute an Assessment Cycle

Business Example

The costs of a marketing survey conducted by an external service provider are to be allocated from the marketing cost center to products P-101 and P-102.



Note:

The primary source of the data for CO-PA is sales order management billing. The primary source of period costs, such as sales and administration costs, for CO-PA is CO-CCA.

You can use cost center assessments to allocate responsibility-oriented costs across profitability segments for profit and loss reporting.

Create and execute an assessment cycle.

Post an invoice from the marketing company C.E.B. Berlin against the cost center AC605-## to pay for a market survey it conducted.

The credit entry in this case will be posted to the vendor account number and the debit entry will be posted against the cost center by using the external services account number. The posting is made in the company code 1000.

At the end of the month, you will allocate the costs from the cost center to the products P-101 to P-102.

1. Post an invoice from the marketing firm C.E.B. Berlin for a market survey it conducted. The posting must be made in the company code **1000**. Debit the External Services account for the cost center AC605-##.

Field Name or Data Type	Value
<i>Vendor</i>	1000 (C.E.B Berlin)
<i>Reference Number</i>	1234##
<i>Invoice Amount</i>	10,000.00
<i>Account Number</i>	417000 (External Services)
<i>Account Assignment</i>	Marketing Cost Center AC605-##

2. Create an allocation cycle, CYC-##, starting January 01, XXXX, to allocate the marketing costs from the *Cost Center* value field to the *Marketing Costs* value field in CO-PA. Use the assessment cost element **692000**, *Marketing Assessments*.
3. Execute your allocation cycle for the current period without the test mode.

Field Name or Data Type	Value
<i>Period From and To</i>	Current period
<i>Fiscal Year</i>	Current fiscal year
<i>Detail Lists</i>	Select
<i>Test Run</i>	Deselect
<i>Cycle</i>	CYC-##
<i>Start Date</i>	01.01 . current year

4. Display the actual line item you just created in the costing-based CO-PA and account-based CO-PA.

Which record type was used to post the line item in costing-based CO-PA?

What is the value in the *Marketing Costs* field in costing-based CO-PA?

How many line items have been posted in the account-based CO-PA versus costing-based CO-PA?



Create and Execute an Assessment Cycle

Business Example

The costs of a marketing survey conducted by an external service provider are to be allocated from the marketing cost center to products P-101 and P-102.



Note:

The primary source of the data for CO-PA is sales order management billing. The primary source of period costs, such as sales and administration costs, for CO-PA is CO-CCA.

You can use cost center assessments to allocate responsibility-oriented costs across profitability segments for profit and loss reporting.

Create and execute an assessment cycle.

Post an invoice from the marketing company C.E.B. Berlin against the cost center AC605-## to pay for a market survey it conducted.

The credit entry in this case will be posted to the vendor account number and the debit entry will be posted against the cost center by using the external services account number. The posting is made in the company code 1000.


At the end of the month, you will allocate the costs from the cost center to the products P-101 to P-102.

1. Post an invoice from the marketing firm C.E.B. Berlin for a market survey it conducted. The posting must be made in the company code **1000**. Debit the External Services account for the cost center AC605-##.

Field Name or Data Type	Value
<i>Vendor</i>	1000 (C.E.B Berlin)
<i>Reference Number</i>	1234##
<i>Invoice Amount</i>	10,000.00
<i>Account Number</i>	417000 (External Services)
<i>Account Assignment</i>	Marketing Cost Center AC605-##

- a) On the SAP Easy Access screen, choose *Accounting* → *Financial Accounting* → *Accounts Payable* → *Document Entry* → *Invoice* (FB60).
- b) In the *Enter Company Code* dialog box, enter **1000** in the *Company Code* field and choose *Continue*.

- c) On the *Enter Vendor Invoice: Company Code 1000* screen, choose the *Tree on* pushbutton.
- d) Open the *Screen variants for items* folder. Double-click the *Z_WITH COST CENTER* screen variant. Then, choose the *Tree off* pushbutton.

 Note:
Screen variants are a good way to show users the relevant fields for entry.


- e) On the *Basic data* tab page, enter the following data:


Field Name or Data Type	Value
<i>Vendor</i>	1000
<i>Invoice date</i>	Today's date
<i>Posting date</i>	Today's date
<i>Reference</i>	1234##
<i>Amount</i>	10000

- f) In the *Items* table, enter the following data:

Field Name or Data Type	Value
<i>G/L acct</i>	417000
<i>D/C</i>	Debit
<i>Amount</i>	10000
<i>Tax Code</i>	0I
<i>Cost Center</i>	AC605-##

- g) Post your document.

 Hint:
During posting, several messages may appear indicating that account 417000 is relevant for tax. These are warning messages. Choose *Enter* to confirm these messages.

- h) Choose  (*Back*) to return to the *SAP Easy Access* screen.

2. Create an allocation cycle, *CYC-##*, starting January 01, XXXX, to allocate the marketing costs from the *Cost Center* value field to the *Marketing Costs* value field in CO-PA. Use the assessment cost element **692000**, *Marketing Assessments*.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Actual Postings* → *Period-End Closing* → *Transfer Cost Center Costs/ Process Costs* → *Assessment*.
- b) On the *Execute Actual Assessment: Initial* screen, choose *Extras* → *Cycle* → *Create*.

- c) On the *CO-PA Create Actual Assessment Cycle: Initial* screen, enter the following data:

Field Name or Data Type	Value
<i>Cycle</i>	CYC-##
<i>Start Date</i>	01.01 . current year

- d) Choose  (Enter).

- e) On the *CO-PA Create Actual Assessment Cycle: Header Data* screen, enter the following data and choose the *Attach segment* pushbutton.

Field Name or Data Type	Value
<i>Text</i>	Group ## Cycle
<i>Sender Select. Type</i>	1 unsplit costs (Overall Costs)
<i>TF basis</i>	1 (costing-based CO-PA)
<i>CO Area</i>	1000

- f) On the *CO-PA Create Actual Assessment Cycle: Segment* screen, enter **1** in the *Segment Name* field and add the description **Segment 1**.

- g) On the *Segment Header* tab page, enter the following data:

Field Name or Data Type	Value
<i>Assessment CElem</i>	692000
<i>Value Field All</i>	VV380
<i>Receiving tracing factor: Rule</i>	<i>Fixed percentages</i>


- h) On the *Senders/Receivers* tab page, enter the following data:

Field Name or Data Type	Value
<i>Cost Center</i>	AC605-##
<i>Cost Element</i>	417000
<i>Product From</i>	P-101
<i>Product To</i>	P-102



- i) On the *Receiver Tracing Factor* tab page, enter the following data:

Product	Portion Percent
<i>P-101</i>	50
<i>P-102</i>	50

- j) Create a *Cycle Run Group* for your assessment cycle. Choose *Goto* → *Cycle run group*.

In the *Create Cycle Run Group* dialog box, enter **GR##** in the *Cycle run group* field and add the description **Group##** by choosing  (*Create*). Choose *Continue* and confirm the entry of the cycle.

k) Save the cycle.

 **Note:**
 If you are prompted for a *Transport request*, choose  (*Create*) to create a request for your ID. Type **Group##** in the *Short Description* field and then choose *Save*. A request will be created for you.


l) Choose *Enter*.

m) Return to the *Execute Actual Assessment: Initial* screen.

3. Execute your allocation cycle for the current period without the test mode.

Field Name or Data Type	Value
<i>Period From and To</i>	Current period
<i>Fiscal Year</i>	Current fiscal year
<i>Detail Lists</i>	Select
<i>Test Run</i>	Deselect
<i>Cycle</i>	CYC-##
<i>Start Date</i>	01 . 01 . current year

a) On *Execute Actual Assessment: Initial* screen, enter the data as mentioned in the exercise.

b) Choose  (*Execute*) and review the assessment list.

You must receive the message that processing was completed without errors. There should be one sender and two receivers.

c) Enter the transaction code **/N** to return to the *SAP Easy Access* screen.


4. Display the actual line item you just created in the costing-based CO-PA and account-based CO-PA.

Which record type was used to post the line item in costing-based CO-PA?

What is the value in the *Marketing Costs* field in costing-based CO-PA?

How many line items have been posted in the account-based CO-PA versus costing-based CO-PA?

a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Item List* → *Actual* (KE24).

b) On *Display Actual Line Items: Initial* screen, enter the following data and choose  (*Execute*).

Field Name or Data Type	Value
<i>Currency type</i>	B0
<i>Record type</i>	D
<i>Period/year</i>	Current
<i>Entered by</i>	AC605-##



Note:

If you receive a warning that you have not sufficiently restricted the selection, just choose *Enter*.

Two line items have been created in the costing-based CO-PA.


- c) On the *Display Actual Line Items: List* screen, choose *Settings* → *Layout* → *Change*. In the *Change Layout* dialog box, add *Product* and *General Market. costs* to *Displayed Columns* from *Column Set* and choose *Continue*.



Hint:

You can sort alphabetically by placing your cursor on the *Column Name*.

You can see that both products *P-101* and *P-102* were assessed 5000 in *General Market.costs*.

- d) On the *Display Actual Line Items: List* screen, enter **/NKEBC** to determine how many line items were created in account-based CO-PA. In the *Set Operating Concern* dialog box, select the *account-based* radio button and choose *Continue*.
- e) Choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Item List* → *Actual (KE24)* to execute the line item report again with account-based set.
- f) In the *Set Controlling Area* dialog box, enter **1000** in the *Controlling Area* field.
- g) On *Display Actual Line Items: Initial* screen, enter the following data and choose  (Execute).

Field Name or Data Type	Value
<i>Period/year</i>	Current
<i>Entered by</i>	AC605-##



Note:

If you receive a warning that you have not sufficiently restricted the selection, choose *Enter*.

If you view the segment-level characteristics in configuration (transaction code `KEQ3`), you will find that the product is segment level for the costing-based CO-PA but not for the account-based CO-PA. Since both products are in the same material group, which is segment-level, only one line item was created.

- h) Double-click the line item. Choose + to open the line item. You will see the *PSG* (Profitability Segment) was debited and the *CTR* (Cost Center) was credited.
- i) To set your operating concern back to costing-based CO-PA, enter the transaction code `/NKEBC`. In the *Set Operating Concern* dialog box, select the *costing-based* radio button and then choose *Enter*. Return to the *SAP Easy Access* screen.

Activity Allocations

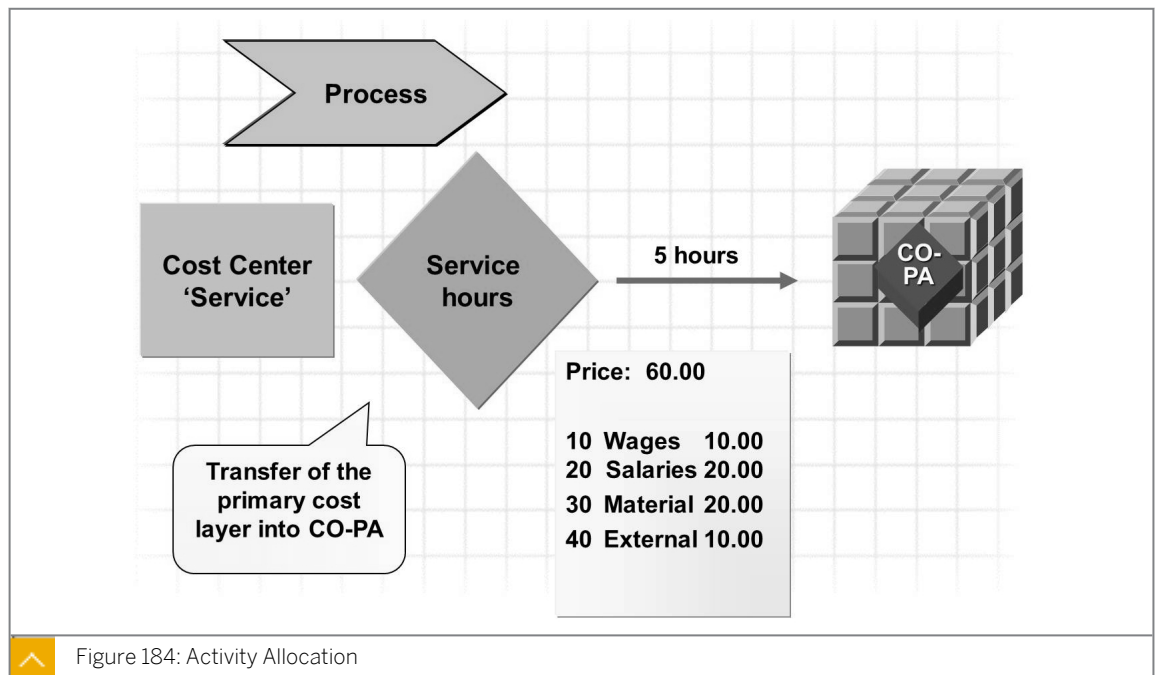


Figure 184: Activity Allocation

You can transfer overhead costs from CO-CCA either on an activity allocation basis or on a periodic basis. You can transfer the activities either directly or indirectly to CO-PA.

You can use a PA transfer structure to control the secondary cost element of activity allocation in the value fields for CO-PA.

You can transfer the cost component split of the prices for each cost center to CO-PA. To do this transfer, activate the appropriate settings in Customizing and then enter the cost elements in the various value fields.

Unit 10

Exercise 26



Allocate Costs to CO-PA Using Activity Types

Business Example

Your research and development cost center manager wants to allocate R&D costs to products whenever possible. The product engineering group spent 10 hours last month improving product P-103. Controlling has set a rate of USD 100.00 per development hour.



Note:

In addition to cost center assessments, you can use activities to allocate the costs from cost centers to CO-PA. In the SAP system, activities are defined as the productive output of a cost center and can be measured in time increments or units. Activity prices can be planned manually or calculated by the system based on planned or actual costs. Activities can be allocated through direct activity allocation, which credits the sending cost center and debits one or more receivers.

Allocate costs to CO-PA using activity types.

Task 1

Create the activity type.

1. Create the activity type **EH##** for the development time in hours. The validity period ranges from January 1 of the current year to December 31, 9999. All the cost center categories must be able to use this activity. The activity type category is *1* because the costs are allocated manually. The secondary cost element, **621000**, will debit the activity receiver and credit the cost center.

Save the activity type.

Field Name or Data Type	Value
Activity Type	EH##
Valid From	01.01 .current year

Basic Data tab page:

Field Name or Data Type	Value
Name	Dev Hours GR ##
Description	Dev Hours GR ##
Activity Unit	H
Cctr categories	*
ATyp category	1

Field Name or Data Type	Value
<i>Allocation cost elem</i>	621000
<i>Price indicator</i>	3

Task 2

Plan the activity price.

- Plan the activity price for this activity type for the current fiscal year in the plan version **0**. The development department plans to spend **1200** hours R&D time on blue bicycles. In Cost Center Accounting, choose *Planning* → *Activities/Prices* to plan a rate of **100** for the activity type **EH##** and the cost center **4500**.

Field Name or Data Type	Value
<i>Version</i>	0
<i>From period</i>	1
<i>To period</i>	12
<i>Fiscal year</i>	Current year
<i>Cost Center</i>	4500
<i>Activity Type</i>	EH##
<i>Entry</i>	Select <i>Form-Based</i>

Field Name or Data Type	Value
<i>Plan activity</i>	1200
<i>Fixed price</i>	100

Task 3

Process the actual activity allocation.

- Process the actual activity allocation for the current period to the product **P-103**, in the company code **1000**, the business area **1000**, and in CO-CCA. The screen variant, *Profitability Segment/Cost Center*, allows you to allocate the costs from a cost center to a profitability segment using an activity type.

Field Name or Data Type	Value
<i>Scrn variant</i>	09SAP Prof.segment/cost center
<i>Input Type</i>	S Individual Entry

Sender:

Field Name or Data Type	Value
<i>Cost Ctr</i>	4500
<i>Acty Type</i>	EH##

Receiver:

Field Name or Data Type	Value
<i>Product</i>	P-103
<i>Company Code</i>	1000
<i>Business Area</i>	1000

Hours consumed: 10 hours

Save the document.

Task 4

Display the actual line item.

1. Display the actual line item you just created in the costing-based CO-PA.

Which record type was used to post the line item?

What is the value in the *Process Sales* field?

Field Name or Data Type	Value
<i>Record type</i>	D
<i>Currency type</i>	B0
<i>Period/year</i>	Current period/year
<i>Entered by</i>	AC605-##
<i>Product</i>	P-103



Allocate Costs to CO-PA Using Activity Types

Business Example

Your research and development cost center manager wants to allocate R&D costs to products whenever possible. The product engineering group spent 10 hours last month improving product P-103. Controlling has set a rate of USD 100.00 per development hour.



Note:

In addition to cost center assessments, you can use activities to allocate the costs from cost centers to CO-PA. In the SAP system, activities are defined as the productive output of a cost center and can be measured in time increments or units. Activity prices can be planned manually or calculated by the system based on planned or actual costs. Activities can be allocated through direct activity allocation, which credits the sending cost center and debits one or more receivers.

Allocate costs to CO-PA using activity types.

Task 1

Create the activity type.

1. Create the activity type **EH##** for the development time in hours. The validity period ranges from January 1 of the current year to December 31, 9999. All the cost center categories must be able to use this activity. The activity type category is *1* because the costs are allocated manually. The secondary cost element, **621000**, will debit the activity receiver and credit the cost center.


Save the activity type.

Field Name or Data Type	Value
Activity Type	EH##
Valid From	01.01 . current year

Basic Data tab page:

Field Name or Data Type	Value
Name	Dev Hours GR ##
Description	Dev Hours GR ##
Activity Unit	H
CCTR categories	*
ATyp category	1

Field Name or Data Type	Value
<i>Allocation cost elem</i>	621000
<i>Price indicator</i>	3

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Master Data* → *Activity Type* → *Individual Processing* → *Create*.
- b) In the *Set Controlling Area* dialog box, enter **1000** in the *Controlling Area* field.
- c) On *Create Activity Type: Initial* screen, enter the data as mentioned in the exercise.
- d) Choose *Enter*.
- e) On *Create Activity Type: Basic* screen, choose the *Basic data* tab page, enter the data as mentioned in the exercise.
- f) Save the activity type.
- g) Choose  (*Back*) to return to the *SAP Easy Access* screen.

Task 2


Plan the activity price.

1. Plan the activity price for this activity type for the current fiscal year in the plan version **0**.
The development department plans to spend **1200** hours R&D time on blue bicycles.
In *Cost Center Accounting*, choose *Planning* → *Activities/Prices* to plan a rate of **100** for the activity type **EH##** and the cost center **4500**.

Field Name or Data Type	Value
<i>Version</i>	0
<i>From period</i>	1
<i>To period</i>	12
<i>Fiscal year</i>	Current year
<i>Cost Center</i>	4500
<i>Activity Type</i>	EH##
<i>Entry</i>	Select <i>Form-Based</i>

Field Name or Data Type	Value
<i>Plan activity</i>	1200
<i>Fixed price</i>	100

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Planning* → *Activity Output/Prices* → *Change* (KP26).

- b) On *Change Activity Type/Price Planning: Initial* screen, enter the data as mentioned in the exercise.
- c) Choose the *Overview* screen pushbutton.
- d) On *Change Activity Type/Price Planning: Overview* screen, enter the data as mentioned in the exercise.
- e) Save your *Plan price* and choose  (*Back*) to return to the *SAP Easy Access* screen.

Task 3

Process the actual activity allocation.

1. Process the actual activity allocation for the current period to the product **P-103**, in the company code **1000**, the business area **1000**, and in CO-CCA.

The screen variant, *Profitability Segment/Cost Center*, allows you to allocate the costs from a cost center to a profitability segment using an activity type.

Field Name or Data Type	Value
<i>Scrn variant</i>	09SAP Prof.segment/cost center
<i>Input Type</i>	S Individual Entry

Sender:

Field Name or Data Type	Value
<i>Cost Ctr</i>	4500
<i>Acty Type</i>	EH##


Receiver:

Field Name or Data Type	Value
<i>Product</i>	P-103
<i>Company Code</i>	1000
<i>Business Area</i>	1000

Hours consumed: 10 hours

Save the document.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Cost Center Accounting* → *Actual Postings* → *Activity Allocation* → *Enter* (KB21N).
- b) On the *Enter Direct Activity Allocation* screen, enter the data as mentioned in the exercise.
- c) In the *Document Item* screen area, enter **10** in the *Quantity* field.
- d) In the *Sender* screen area, enter the data as mentioned in the exercise.
- e) In the *Receiver* screen area, choose the *Prof. Segmt* pushbutton.

- f) In the *Assignment to a Profitability Segment* dialog box, enter the data as mentioned in the exercise and choose the *Continue* pushbutton.
- g) Save your activity allocation and choose  (*Back*) to return to the *SAP Easy Access* screen.

Task 4


Display the actual line item.

1. Display the actual line item you just created in the costing-based CO-PA.

Which record type was used to post the line item?

What is the value in the *Process Sales* field?

Field Name or Data Type	Value
<i>Record type</i>	D
<i>Currency type</i>	B0
<i>Period/year</i>	Current period/year
<i>Entered by</i>	AC605-##
<i>Product</i>	P-103

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Item List* → *Actual*.
- b) In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field.
- c) On *Display Actual Line Items: Initial* screen, enter the data as mentioned in the exercise and choose  (*Execute*).
- d) Select the *costing-based* radio button and choose *Continue*.
- e) On the *Display Actual Line Items: List* screen, choose *Settings* → *Layout* → *Change*.
- f) In the *Change Layout* dialog box, choose *Process "Sales"* from *Column Set* and add it to *Displayed Columns*. Choose *Continue*.



Hint:

You can sort alphabetically by placing your cursor on the *Column Name*.

- g) Note that 1000 was charged to *Value Field Process "Sales"* (10 hours x 100 activity price). The PA transfer structure for activity allocation uses this value field for the cost element 621000.



LESSON SUMMARY

You should now be able to:

- Allocate overhead costs to CO-PA
- Perform a cost center assessment
- Allocate Activity Costs

Unit 10

Lesson 4



Processing Internal Orders

LESSON OVERVIEW

This lesson explains how to process and settle internal orders.

Business Example

Your corporate operations department would like to allocate costs across the manufacturing plants and the distribution centers in Canada, the United States, and Japan. They can track the services provided at the division level and ensure that the logistics costs are included in the contribution margin reports. As a result, you need to execute allocations and settlements of overhead costs. For this reason, you require the following knowledge:

- How to settle internal orders to CO-PA



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Settle internal orders to CO-PA

Settlement of Orders

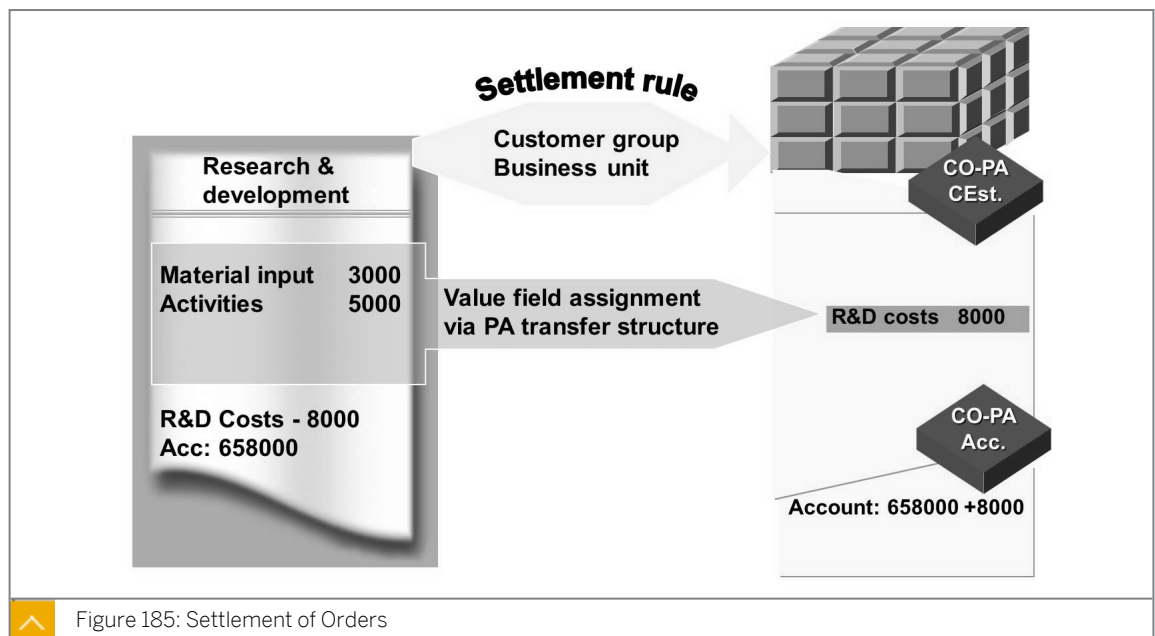


Figure 185: Settlement of Orders

You can settle internal orders, sales orders, projects, production orders, and run schedules with production cost collectors to profitability segments.

Use of internal orders and their relevance to CO-PA:

- Internal orders and projects can be used to control the costs of an internal activity, such as the costs of an advertising campaign. The costs of the activity are posted to the order and collected there. At the end of the activity, the activity costs are settled to the appropriate profitability segments, such as the product range and the sales area.
- You can also use Management Accounting orders to calculate the anticipated values in order to evaluate the accuracy of your accrual method. Credit the accrual costs calculated in CO-PA to a special cost order for accruals. Currently this can only be done manually. When the costs are actually incurred, they are posted to that order as well, so that the difference between the anticipated costs and the actual costs can be displayed at the order level.
- A third possible use of internal orders or projects is in make-to-order (MTO) manufacturing. If you are handling sales orders, a customer project, or a Management Accounting order to which revenue postings are allowed, you can post costs, such as production costs and supply costs, as well as revenue and sales deductions to the order or project. When the product is complete, the costs and revenues can be settled to CO-PA. You can also transfer the accrued values that are particularly important for progress billing.

Settling Orders – Customizing (1)

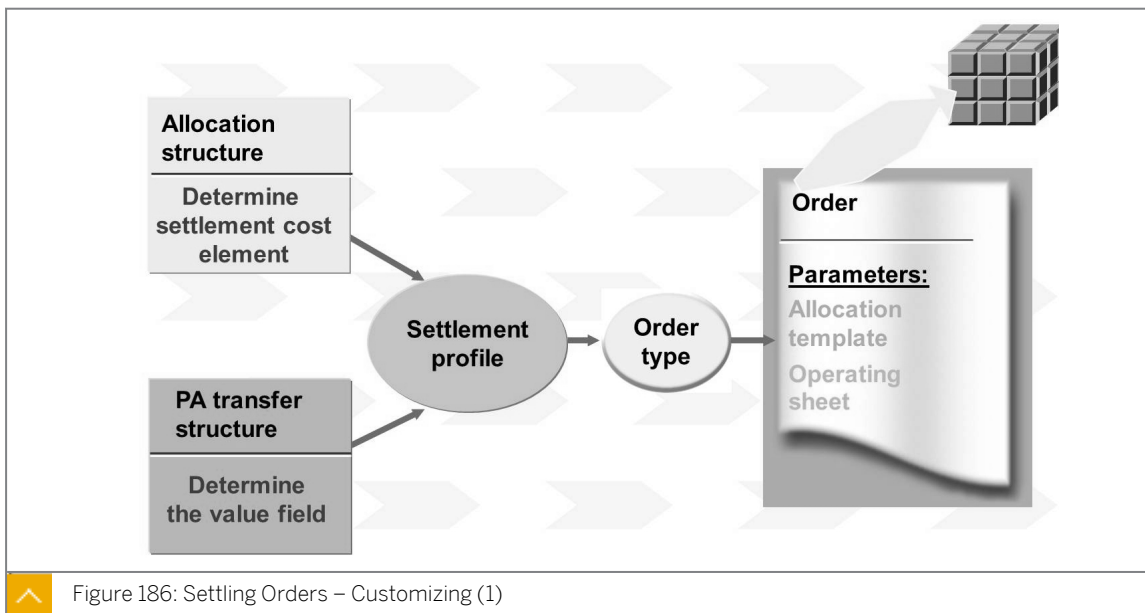


Figure 186: Settling Orders – Customizing (1)

When you create an order, specify an *Order Type*. The system uses this order type to determine which settlement profile and, as a result, which allocation structure and PA transfer structure to use.

In account-based CO-PA, costs are settled to the settlement cost element specified in the settlement structure.

In costing-based CO-PA, costs are settled from the original cost elements to the value fields to which they are assigned in the PA transfer structure.

Settling Orders – Customizing (2)

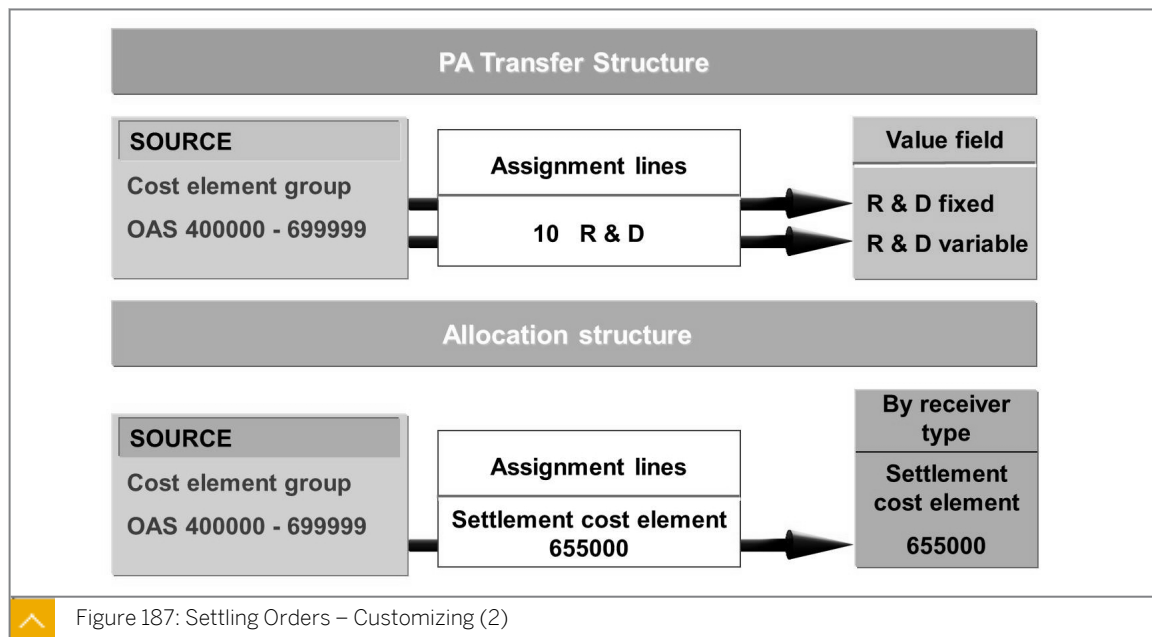


Figure 187: Settling Orders – Customizing (2)

The PA transfer structure contains the assignment of costs and revenues to the value fields in costing-based CO-PA. PA transfer structures are used in order settlement, direct postings from FI, and internal activity allocations in Management Accounting.

A PA transfer structure consists of a number of different assignment lines. Each assignment line contains the assignment of one interval or a group of cost or revenue elements to the required value field.

A PA transfer structure must meet the following criteria for successful settlement of orders:

- The assignment must be complete
All cost and revenue elements that can receive costs or revenues must be assigned to a value field in the PA transfer structure.
- The assignment must be unique
Each cost or revenue element can occur only one time within a PA transfer structure.

During settlement, the costs incurred under the primary and secondary cost elements by a sender are allocated to one or more receivers. When you settle by cost element, you settle using the original cost element.

An allocation structure consists of one or several settlement assignments. An assignment defines which costs (origin: Cost element groups from debit cost elements) are to be settled to which receiver type (for example, cost center or order).

The following options are the alternatives in allocation structure:

- You can assign the debit cost element groups to a settlement cost element.
- You can settle by cost element, which means the debit cost element is the settlement cost element.



How to Settle Internal Orders to CO-PA



Demonstrate the steps listed in the Settle Internal Orders to CO-PA exercise.



Settle Internal Orders to CO-PA

Business Example

Your sales manager has planned to participate in a number of trade fairs this year. The costs for the trade fairs are collected on internal orders to track the cost for each fair separately from the recurring cost center costs.



Note:

In CO, internal orders can be used to collect the costs for specific projects, such as research and development or marketing events. Internal orders allow you to view and monitor costs on an alternate controlling object and periodically settle these costs to a cost center or a profitability segment.

Internal orders allow you to separate project costs from recurring expenditures.

Settle internal orders to CO-PA.

Create an internal order in the company code 1000 to capture the costs for the Fun & Rec Show in Las Vegas.



Field Name or Data Type	Value
Order Type	0450 (Exhibitions)
Short Text	Fun & Rec Show
Business Area	5000
Profit Center	1000

Make sure you release the internal order, because the costs will be posted to it.

Create a settlement rule that determines that the internal order costs should be settled to CO-PA for material group 001.

1. Create an internal order to collect the costs of the Fun & Rec Show in Las Vegas. Create the settlement rule on the order to settle to CO-PA.
2. Charge costs to the internal order with a journal entry in FI. So far, you have incurred the following costs for the Las Vegas trade fair:
Amount: 1000
Cost element: 476000
All costs are exempt from tax (tax code V0). These costs have been paid from bank account 113100.

3. In the CO internal order application, process the internal order settlement for the current period to CO-PA.
4. View the line item you created with the settlement of your internal order in CO-PA.
Which value fields were populated? Why?
5. In Customizing, view the settlement configuration for the order type 0450. To which settlement profile is this order type assigned?
Display the settlement profile settings. What allocation structure is used in the settlement profile?
Which CO-PA transfer structure is linked to this settlement profile?
6. What is the purpose of the PA transfer structure?
To which value fields are total costs assigned?



Settle Internal Orders to CO-PA

Business Example

Your sales manager has planned to participate in a number of trade fairs this year. The costs for the trade fairs are collected on internal orders to track the cost for each fair separately from the recurring cost center costs.



Note:

In CO, internal orders can be used to collect the costs for specific projects, such as research and development or marketing events. Internal orders allow you to view and monitor costs on an alternate controlling object and periodically settle these costs to a cost center or a profitability segment.

Internal orders allow you to separate project costs from recurring expenditures.

Settle internal orders to CO-PA.

Create an internal order in the company code 1000 to capture the costs for the Fun & Rec Show in Las Vegas.



Field Name or Data Type	Value
Order Type	0450 (Exhibitions)
Short Text	Fun & Rec Show
Business Area	5000
Profit Center	1000

Make sure you release the internal order, because the costs will be posted to it.

Create a settlement rule that determines that the internal order costs should be settled to CO-PA for material group 001.

1. Create an internal order to collect the costs of the Fun & Rec Show in Las Vegas. Create the settlement rule on the order to settle to CO-PA.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Internal Orders* → *Master Data* → *Special Functions* → *Order* → *Create*.
 - b) On *Create Internal Order: Initial* screen, enter **0450** in the *Order Type* field and choose *Enter*.

 Note:
If prompted, enter **1000** in the *Controlling Area*.



- c) On the *Create Internal Order: Master data* screen, enter **Fun & Rec Show** in the *Description* field.
- d) On the *Assignments* tab page, enter the following data:

Field Name or Data Type	Value
<i>Company Code</i>	1000
<i>Business Area</i>	5000
<i>Profit Center</i>	1000

- e) On the *Control data* tab page, if the *System status* is *CRTD* then choose the *Release* pushbutton. The *System status* should change to *REL*.
Choose the *Settlement Rule* pushbutton.
- f) On the *Maintain Settlement Rule: Overview* screen, enter **PSG** in the *Cat* column and choose *Continue*.
Choose the *Settlement hierarchy* pushbutton.



 Figure 188: Settlement Hierarchy Button

- g) In the *Assignment to a Profitability Segment* dialog box, enter **001** in the *Material Group* field and choose *Continue*.
 - h) Choose  (*Back*) to return to the *Create Internal Order: Master data* screen. Save the order and settlement rule.
 - i) Document your order number and choose  (*Back*) to return to the *SAP Easy Access* screen.
2. Charge costs to the internal order with a journal entry in FI. So far, you have incurred the following costs for the Las Vegas trade fair:
Amount: 1000
Cost element: 476000
All costs are exempt from tax (tax code V0). These costs have been paid from bank account 113100.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Document Entry* → *Enter G/L Account Document*.



Note:

If prompted for company code, enter **1000** and choose *Enter*.

- b) On the *Enter G/L Account Document: Company Code 1000* screen, choose the *Basic Data* tab page and enter the following data:

Field Name or Data Type	Value
<i>Document Date</i>	Current date
<i>Posting Date</i>	Current date

- c) In the *Items* table, enter the following data:

Row 1

Field Name or Data Type	Value
<i>G/L acct</i>	476000
<i>D/C</i>	Debit
<i>Amount in doc. curr.</i>	1000
<i>Tax Code</i>	v0
<i>Order</i>	Your order

Row 2

Field Name or Data Type	Value
<i>G/L acct</i>	113100
<i>D/C</i>	Credit
<i>Amount in doc. curr.</i>	1000

- d) Save the entries.

- e) Document the order number and choose  (*Back*) to return to the *SAP Easy Access* screen.




Hint:

If you do not have your order number, open another session and execute the transaction code **K003**. Your order number should display in the *Order* field.

3. In the CO internal order application, process the internal order settlement for the current period to CO-PA.


- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Internal Orders* → *Period-End Closing* → *Single Functions* → *Settlement* → *Individual Processing*.
- b) On the *Actual Settlement: Order* screen, under the *Parameters* pane, enter the following data:


Field Name or Data Type	Value
<i>Order</i>	Your order number
<i>Settlement period</i>	Current period
<i>Fiscal Year</i>	Current year
<i>Test Run</i>	Deselect

- c) Choose  (*Execute*).
 - d) On the *Actual Settlement: Order Basic List* screen, validate the values entered and go back to the *SAP Easy Access* screen.
4. View the line item you created with the settlement of your internal order in CO-PA. Which value fields were populated? Why?

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Item List* → *Actual* (KE24).
- b) On the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field.
- c) Select the *costing-based* radio button and choose *Continue*.
- d) On the *Display Actual Line Items: Initial* screen, enter the following data:




Field Name or Data Type	Value
<i>Record type</i>	C
<i>Period/ year</i>	Current period/Current year
<i>Entered by</i>	Your user ID

- Choose  (*Execute*).
- e) On the *Display Actual Line Items: List* screen, choose *Settings* → *Layout* → *Change*.
- f) In the *Change Layout* dialog box, choose *Marketing activities* from the *Column Set* row and choose the *Show selected fields* pushbutton to add it to the *Displayed Column* row.



Hint:
You can sort the *Column Set* alphabetically by clicking on the *Column Name*.


- g) The *Marketing Activities* value field was populated based on the configuration on the *PA Transfer Structure*.

- h) Choose *Continue* and then choose  (*Back*) to return to the *SAP Easy Access* screen.
5. In Customizing, view the settlement configuration for the order type 0450. To which settlement profile is this order type assigned?
 Display the settlement profile settings. What allocation structure is used in the settlement profile?
 Which CO-PA transfer structure is linked to this settlement profile?
- a) In Customizing, choose, *Controlling* → *Internal Orders* → *Order Master Data* → *Define Order Type*.
- b) On the *Change View "Order Types": Overview* screen, choose 0450 and double-click that row. For the order type 0450, the value for the *Settlement Prof.* field is 100.
- c) Choose  (*Back*) to return to the Customizing screen.
- d) Display the settlement profile settings. Which allocation structure is used in the settlement profile?
 In Customizing, choose *Controlling* → *Internal Orders* → *Actual Postings* → *Settlement* → *Maintain Settlement Profiles*.
- e) In the *Choose Activity* dialog box, double-click *Maintain Settlement Profiles*.
- f) On the *Change View "Settlement Profile": Overview* screen, double-click *Settlement of marketing orders profile 100*.
- g) On the *Change View "Settlement Profile": Details* screen, the following *Default Values* are displayed:
 The *Allocation structure* is A1
 The *PA transfer str.* is 10
 Under the *Valid Receivers* pane, you will see that settlement to a *Profit Segment* is allowed.
- h) Choose  (*Back*) twice to return to the Customizing screen.
6. What is the purpose of the PA transfer structure?
 To which value fields are total costs assigned?
- a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Flows of Actual Values* → *Order and Project Settlement* → *Define PA Transfer Structure for Settlement*.
- b) On the *Change View "PA Transfer Structures": Overview* screen, choose row 10 in the *Structure* column.
- c) In the *Dialog Structure* pane, choose *PA transfer structures* → *Assignment lines* → *Source* to view the folder content. Highlight the row *Total Costs* and double-click *Source* in the *Dialog Structure* pane.
- d) On the *Change View "Source": Details* screen, choose *Data Structure* → *Source*. On the *Cost Element* tab page, choose the *Display* pushbutton for **OAS_SEC** in the *Group* field.
- e) In the *Display Cost Element Group* dialog box, check the cost element in **OAS** → **SEC_OAS_ALLOC_OAS_ORDERS-650000**.
 Close the *Display Cost Element Group* dialog box.

f) Double-click *Value fields* in the *Dialog Structure* pane to view *VV410* in the *Value fld* column.

The transfer structure determines the value fields to which costs will be settled. It consists of the following:

- The source cost element group
- The value fields to which assignment groups are settled

g) Choose  (*Back*) to return to the *SAP Easy Access* screen.



LESSON SUMMARY

You should now be able to:

- Settle internal orders to CO-PA



Creating Direct Postings from FI

LESSON OVERVIEW

This lesson explains how to create direct postings to Profitability Analysis (CO-PA).



You can use direct postings in Financial Accounting (FI) to post actual sales reductions or actual costs, such as freight costs estimated when the period was closed to allow short-term analysis to the corresponding profitability segments. Using direct postings supplements the estimated costs with the actual costs.

In a profitability report, you can display both estimated costs and actual costs. You can post actual costs to the original profitability segment, to the sales order, or to a combination of customer and product. If a detailed assignment is no longer possible or necessary, you can post actual costs to a higher level, for example, freight costs to the division level.

Explain that the CO-PA transfer structure, FI, is always used for the costing-based CO-PA to map costs to value fields.

Business Example

There is an Accounts Receivable that has been determined to be uncollectible. Therefore, the Finance department is going to write this receivable off. This expense should be reflected in Profitability Analysis as well.

For this reason, you require the following knowledge:

- An understanding of direct postings from Financial Accounting (FI)
- An understanding of automatic account assignment



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Create direct postings from FI
- Post a revaluation of a material and view the CO-PA documents

Direct Postings from FI

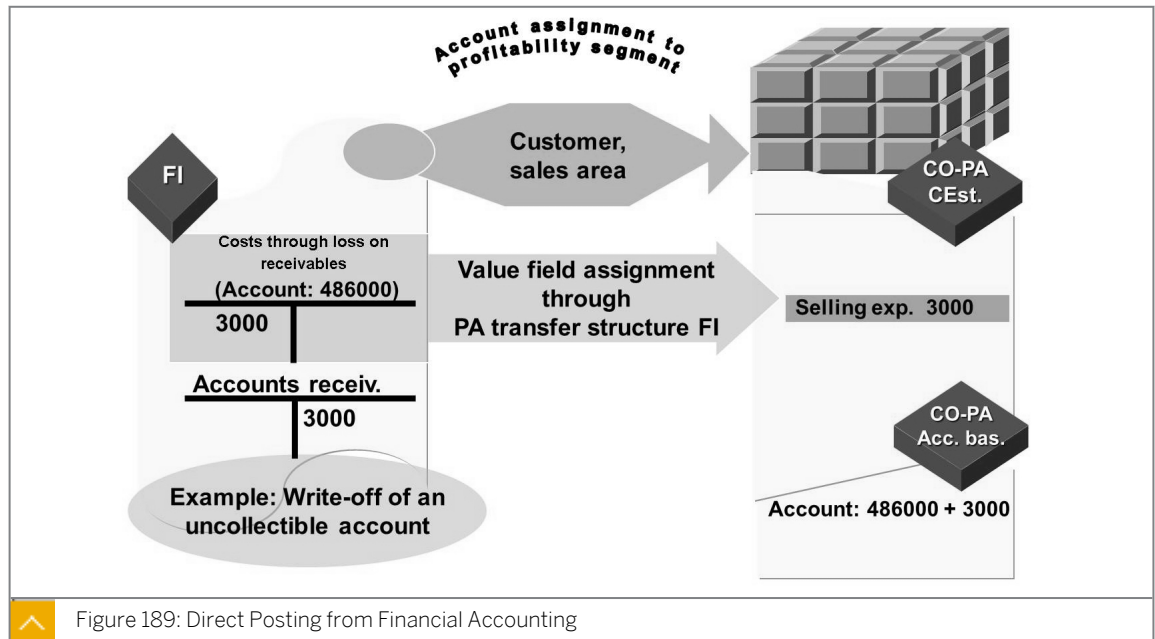


Figure 189: Direct Posting from Financial Accounting

Direct posting enables you to post direct costs, revenue, and sales deductions to profitability segments. Examples of these postings include licensing fees for purchased merchandise, special direct costs from sales, such as transportation insurance for a certain shipment, cost and revenues for services, or invoices received for a marketing campaign.

You assign the values to a profitability segment directly in the FI posting transaction. In the FI posting transaction, you can call up a special assignment dialog box for each posting line by clicking the *Prof. segment* field.

In this dialog box, the system displays the characteristics that you can choose from the operating concern you are working in. To define the structure of the dialog box, you can create a characteristic group for the RFBU activity in Customizing. The characteristic group defines which characteristics are displayed for selection.

All the assignments of values and quantities to the value fields in costing-based CO-PA are defined in the PA transfer structure, FI, which you maintain in Customizing.

In account-based CO-PA, data is posted in the same cost or revenue element. If your system allows dual postings to a profitability segment and a cost center, the real posting always goes to the profitability segment. The cost center is posted for statistical purposes only.



How to Create a Direct Posting from FI to CO-PA



Demonstrate the steps listed in the Create a Direct Posting from FI to CO-PA exercise.

Unit 10

Exercise 28



Create a Direct Posting from FI to CO-PA

Business Example

Your sales manager has decided to pay the top salesperson a bonus of USD 10,000 for a major order that the salesperson has won from one of your top customers. A special payment is processed directly in FI as a commission cost, but must be recorded in COPA as a commission cost with a reference to the relevant customer.



Note:

Costs usually flow through other Controlling areas into CO-PA. However, you can also post them directly from FI into CO-PA. The real account assignment in this case is to determine a profitability segment based on the characteristic values that you have specified in the posting.

Create a direct posting from FI to CO-PA.

1. In FI, create a journal entry for customer **T-CO05A##** with sales organization **1000**, distribution channel **10**, and division **00**. Because this entry is a monthly recurring entry, use the "With profitability segment" account assignment template AC605 on the left of the screen. This account assignment template automatically populates all the necessary characteristic values and accounts.

Your entry should appear as follows:

Debit	Sales Commissions	Account	435000	Amount 10,000.00
Credit	Bank	Account	113100	Amount 10,000.00

Go to the detail screen for the profitability segment and enter the customer's number.
Save your entry.

Document number: _____

2. Display the actual line item you just created in costing-based and account-based CO-PA.
Which record type was used to post the line item?
What is the value in the *Miscellaneous Costs* field?
3. View the *PA Transfer Structure for Direct Postings* from FI.

Unit 10

Solution 28



Create a Direct Posting from FI to CO-PA

Business Example

Your sales manager has decided to pay the top salesperson a bonus of USD 10,000 for a major order that the salesperson has won from one of your top customers. A special payment is processed directly in FI as a commission cost, but must be recorded in COPA as a commission cost with a reference to the relevant customer.



Note:

Costs usually flow through other Controlling areas into CO-PA. However, you can also post them directly from FI into CO-PA. The real account assignment in this case is to determine a profitability segment based on the characteristic values that you have specified in the posting.

Create a direct posting from FI to CO-PA.

1. In FI, create a journal entry for customer **T-CO05A##** with sales organization **1000**, distribution channel **10**, and division **00**. Because this entry is a monthly recurring entry, use the "With profitability segment" account assignment template AC605 on the left of the screen. This account assignment template automatically populates all the necessary characteristic values and accounts.

Your entry should appear as follows:

Debit	Sales Commissions	Account	435000	Amount 10,000.00
Credit	Bank	Account	113100	Amount 10,000.00

Go to the detail screen for the profitability segment and enter the customer's number. Save your entry.

Document number: _____

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Financial Accounting* → *General Ledger* → *Document Entry* → *Enter G/L Account Document*.



Note:

If prompted for the company code, enter **1000**.

- b) On the *Enter G/L Account Document: Company Code 1000* screen, choose the *Basic Data* tab page and enter the current date in the *Document Date* field.

- c) Choose the *Tree on* pushbutton.
- d) In the *Tree* column, open the *Screen variants for items* folder. Double-click *Z_WITH_PROFITABILITY_SEGMENT*.
- e) Choose the *Tree off* pushbutton.
- f) In the *Items* table, enter the following data in row 1:

Field Name or Data Type	Value
<i>G/L acct</i>	435000
<i>D/C</i>	Debit
<i>Amount in doc. curr.</i>	10000

Choose  (*Profit. Segment*).


- g) In the *Assignment to a Profitability Segment* dialog box, enter the following data:

Field Name or Data Type	Value
<i>Customer</i>	T-CO05A##
<i>Sales Org.</i>	1000
<i>Distr. Channel</i>	10
<i>Division</i>	00

Choose the *Continue* pushbutton.



Note:

Your *Profit. Segment* now has , which means there is a profitability segment assigned.

- h) On the *Enter G/L Account Document: Company Code 1000* screen, in row 2 of the *Items* table, enter the following data:

Field Name or Data Type	Value
<i>G/L acct</i>	113100
<i>D/C</i>	Credit
<i>Amount in doc. curr.</i>	10000

- i) Post your document and choose  (*Back*) to return to the *SAP Easy Access* screen.

2. Display the actual line item you just created in costing-based and account-based CO-PA.

Which record type was used to post the line item?

What is the value in the *Miscellaneous Costs* field?


- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Item List* → *Actual* (⌘E24).



Note:
If prompted for the operating concern, enter **IDEA** and select the *costing-based* radio button.

- b) On *Display Actual Line Items: Initial Screen*, enter the following data:

Field Name or Data Type	Value
<i>Currency type</i>	10
<i>Record type</i>	B
<i>Period/year</i>	Current period/year
<i>Entered by</i>	AC605-##

Choose  (*Execute*).



Note:
If you receive the warning that you have not restricted the selection criteria enough, choose *Enter*.

- c) On the *Display Actual Line Items: List* screen, choose the *Settings* → *Layout* → *Change*.
- d) In the *Change Layout* dialog box, under the *Displayed Columns* pane, choose *Miscellaneous Cost* from the *Column Set* column and choose the *Show selected fields* pushbutton. The field is added to the *Displayed Columns* column. Choose the *Continue* pushbutton.



Hint:
You can sort alphabetically by placing your cursor on the *Column Name*.


- e) You can see in costing-based CO-PA that the value was charged to the *Miscellaneous Costs* value field.
The value was charged to the *Miscellaneous Costs* value field because of the CO-PA transfer structure.
- f) To view the line items in account-based CO-PA, use the transaction code */NKEBC*.
In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field and select the *account-based* radio button. Choose the *Continue* pushbutton.
- g) To execute the line item report again, on the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Item List* → *Actual* (KE24).



Note:
If prompted for the controlling area, enter **1000**.


- h) On *Display Actual Line Items: Initial Screen*, enter the following data:

Field Name or Data Type	Value
<i>Period/year</i>	Current period/year
<i>Entered by</i>	AC605-##

Choose  (*Execute*).




Note:
If you receive the warning that you have not sufficiently restricted the selection criteria, choose *Enter*.

- i) On the *Display Actual Line Items: List* screen, double-click the line item for *Cost Element 435000*. Choose + to open the line item. You will see that *PSG* (Profitability Segment) was debited. Because this is account-based, there is no *Value Field*. The *Cost Element* is used.
- j) Set your operating concern back to costing-based. Use the transaction code */NKEBC*. In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field and select the *costing-based* radio button.
- k) Choose the *Continue* pushbutton and choose  (*Back*) to return to the *SAP Easy Access* screen.
3. View the *PA Transfer Structure for Direct Postings from FI*.
- a) In *Customizing*, choose *Controlling* → *Profitability Analysis* → *Flows of Actual Values* → *Direct Postings from FI/MM* → *Maintain PA Transfer Structure for Direct Postings*.
- b) On the *Change View "PA transfer structures": Overview* screen, select the row for *FI* in the *Structure* column. Select assignment line 10. In the *Dialog Structure* column, choose *PA transfer structures* → *Assignment lines*. Double-click *Assignment lines*.

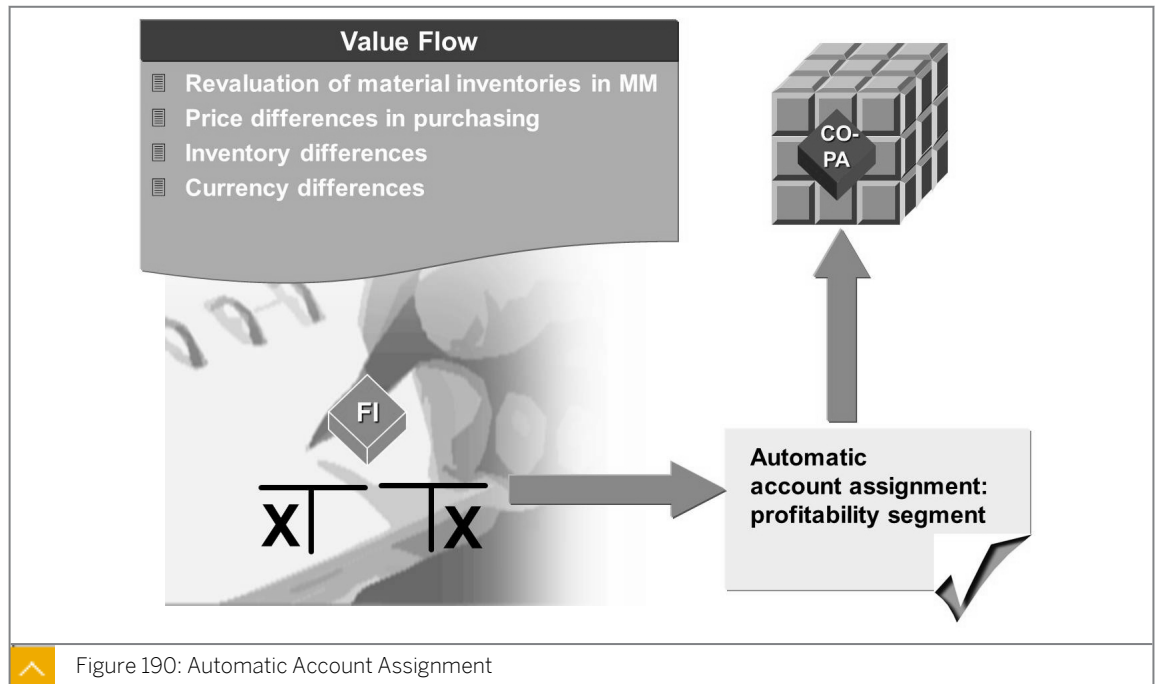


Note:
If prompted, in the *Set Controlling Area* dialog box, enter **1000** in the *Controlling Area* field.

- c) Select the row for *FI* and choose *PA transfer structures* → *Assignment lines* → *Source*. Double-click *Source*.
The source cost elements are *Cost Element Group OAS*.

- d) On the *Change View "Source": Details* screen, under the *Cost Element* pane, double-click *OAS* in the *Group* field.
- e) In the *Display Cost Element Group* dialog box, check the cost element in *OAS → OAS_PRIM → OAS_PERS → OAS_P_IMP*. Cost element 435000 is included in the range.
Close the dialog box.
- f) In the *Dialog Structure* column, choose *PA transfer structures → Assignment lines → Value fields*.
You will see the *VV280* value, which is why our record type *B* was in the *Miscellaneous Costs* value field.
- g) Choose  (*Back*) to return to the *SAP Easy Access* screen.

Automatic Account Assignment



Automatic postings, such as those generated in Materials Management (MM), can be passed on to CO-PA using automatic PA assignment functions. The documents are updated in CO-PA for the profitability segment based on characteristic information in the corresponding FI document.

Automatic postings should be used in special cases for specific accounts and to represent rare business transactions.

It is recommended to use an automatic PA assignment for the following transactions:

- Transferring price differences posted in the purchasing application component due to the price changes in an invoice
- Transferring income or expenses that occur due to the revaluation of material inventories
- Transferring inventory differences

Remember that the cost or revenue elements that receive automatic postings are assigned to value fields in the costing-based CO-PA in the PA transfer structure, FI, which you maintain in Customizing.



How to Create a Direct Posting from MM to CO-PA

Demonstrate the steps to perform account assignment automatically.

1. This type of posting will not take place frequently, but can be used to post any type of automatic transaction to CO-PA. Examples include inventory or currency revaluations.
 - a) Enter a manual price change for the product **M-18** in the plant **1000**. The vendor has increased the price of this product by USD 100.

Field Name or Data Type	Value
<i>Material</i>	M-18
<i>Plant</i>	1000

Logistics → Materials Management → Valuation → Change in Material Price → Change Material Prices.

- b) Enter a price that is higher than the displayed price and save the process. To display the documents created, choose *Display Document → Accounting Documents*.
 - c) Drill down to the CO-PA document and display the value field that was populated.
 - d) Explain the configuration settings: The FI – PA Transfer Structure will need to include the accounts posted to during inventory revaluation. These accounts need to be set up as cost elements.
 - e) The Automatic Account Assignment table needs to be maintained by adding the appropriate account to the table. To add the account in Customizing, choose *Controlling → Profitability Analysis → Flow of Actual Values → Direct Postings from FI/MM → Automatic Account Assignment*.
-

Unit 10

Exercise 29



Post a Revaluation of a Material and View the CO-PA Documents

Business Example

Your sales manager has decided to pay his top salesperson a special bonus of USD 10,000 for a major order that the salesperson has won from one of your top customers.



Note:

Automatic postings, such as the ones created in MM, can be posted to CO-PA using automatic account assignment.

Use direct posting to post to a profitability segment in the following cases:

- Transfer of price differences as period costs
Example: In Purchasing, prices that deviate from the order are posted upon receipt of the invoice.
- Transfer of revenues and expenses by material valuation as period costs
Example: Price changes can lead to a revaluation of material stocks, which can be posted as revenues or expenses.
- Transfer of inventory differences as period costs.

Post a revaluation for product **M-##** in MM. Assume that the price of this product has increased by USD 100.00 and that it is not revaluated with Product Cost Controlling. Use company code **1000** and plant **1000**.

Save the document number.

1. Post a revaluation for product **M-##** in MM. Assume that the price has increased by USD 100.00 and that this material is not revaluated with Product Cost Controlling.
2. What account assignment did the material price change document post to?
3. View the PA transfer structure for this posting.
4. View the line item you created with the price change in CO-PA.



Post a Revaluation of a Material and View the CO-PA Documents

Business Example

Your sales manager has decided to pay his top salesperson a special bonus of USD 10,000 for a major order that the salesperson has won from one of your top customers.



Note:

Automatic postings, such as the ones created in MM, can be posted to CO-PA using automatic account assignment.

Use direct posting to post to a profitability segment in the following cases:

- Transfer of price differences as period costs
Example: In Purchasing, prices that deviate from the order are posted upon receipt of the invoice.
- Transfer of revenues and expenses by material valuation as period costs
Example: Price changes can lead to a revaluation of material stocks, which can be posted as revenues or expenses.
- Transfer of inventory differences as period costs.

Post a revaluation for product **M-##** in MM. Assume that the price of this product has increased by USD 100.00 and that it is not revaluated with Product Cost Controlling. Use company code **1000** and plant **1000**.

Save the document number.

1. Post a revaluation for product **M-##** in MM. Assume that the price has increased by USD 100.00 and that this material is not revaluated with Product Cost Controlling.
 - a) On the *SAP Easy Access* screen, choose *Logistics* → *Materials Management* → *Valuation* → *Change in Material Price* → *Change Material Prices* (MR21).
 - b) On *Price Change – Overview* screen, enter the following data:


Field Name or Data Type	Value
<i>Posting Date</i>	Current date
<i>Company Code</i>	1000
<i>Plant</i>	1000

Field Name or Data Type	Value
<i>Doc. Header Text</i>	<i>Price change</i>

c) Choose *Enter*.

d) On the *Price Change – Overview* screen, enter the following data:


Field Name or Data Type	Value
<i>Material</i>	M-##
<i>New price</i>	Old price (visible after pressing ENTER) + 100

e) Save the document and choose  (*Back*) to return to the *SAP Easy Access* screen.

2. What account assignment did the material price change document post to?

a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Flows of Actual Values* → *Direct Posting from FI/MM* → *Automatic Account Assignment* (OKB9).

For company code 1000, the G/L account/cost element 232510, which is used in *Automatic Account Determination*, is assigned to a *Profitability Segment*.

b) Choose  (*Back*) to return to the Customizing screen.

3. View the PA transfer structure for this posting.

a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Flows of Actual Values* → *Direct Posting from FI/MM* → *Maintain PA Transfer Structure for Direct Postings* (KEI3).

b) On the *Change View “PA transfer structures”*: *Overview* screen, select the *FI* row to highlight it.

c) In the *Dialog Structure* column, choose *PA transfer structure* → *Assignment lines*.

d) Highlight the row *Direct costs from FI* and double-click *Source* in the *Dialog Structure* column.


e) On the *Change View “Source”*: *Details* screen, choose the *Cost Element* tab and double-click *OAS* in the *Group* field.

In the *Display Cost Element Group* dialog box, check the cost element in *OAS* → *OAS_PRIM* → *OAS_CHANGE* → 232510.

Cost element 232510 is included here. Close the *Display Cost Element Group* dialog box.

f) In the *Dialog Structure* column, choose *PA transfer structures* → *Assignment lines* → *Value fields*. Check that the value VV280 appears in the *Value fld* column.

The value in VV280 determines why the settlement was in the *Miscellaneous Costs* value field.

g) Choose  (*Back*) to return to the *SAP Easy Access* screen.

4. View the line item you created with the price change in CO-PA.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Items* → *Actual* (KE24).




Note:

If prompted for your operating concern, enter **IDEA** and select the *costing-based* radio button and then choose *Enter*.

- b) On *Display Actual Line Items: Initial* screen, enter the following data:


Field Name or Data Type	Value
<i>Record type</i>	B
<i>Period/year</i>	Current period/Current year
<i>Entered by</i>	AC605-##

- c) Choose  (*Execute*).
- d) On the *Display Actual Line Items: List* screen, choose *Settings* → *Layout* → *Change*.
- e) In the *Change Layout* dialog box, choose *Miscellaneous Costs* in the *Column Set* column and choose the *Show selected fields* pushbutton to add the field to the *Displayed Columns* column. Choose the *Continue* pushbutton.



Hint:

You can sort the *Column Set* alphabetically by clicking on the *Column Name*.

- f) View the row for *Cost Element 232510*. The *Miscellaneous Costs* value field was populated based upon the configuration in the *CO-PA Transfer Structure*.
- g) Choose  (*Back*) to return to the *SAP Easy Access* screen.



LESSON SUMMARY

You should now be able to:

- Create direct postings from FI
- Post a revaluation of a material and view the CO-PA documents



Evaluating Other Actual Postings in CO-PA

LESSON OVERVIEW

This lesson explains how to settle variances to Profitability Analysis (CO-PA) and evaluate the actual postings in CO-PA.

Business Example

Mr. Ding, your Taiwanese product manager, has been informed of price increases for bicycle seats, which are purchased externally. He wants to know how that will affect contribution margins. He also wants to analyze the cost of production variances due to scrap and the use of reflectors for the three models within the “Blue Bicycle” product group. For this reason, you require the following knowledge:

- An understanding of the integration of production variances



Costs, revenues, and sales reductions can be posted to sales orders in the Sales and Distribution (SD) system, which allows revenue postings. After completion of the posting, the costs and revenues can be settled in CO-PA.

Accrued values, such as the costs of sales and provisions for imminent losses, can also be transferred to CO-PA. This transfer of values is particularly important for milestone billing.

Explain the difference between a cost-bearing and revenue-bearing sales order and a normal sales order from the point of view of CO-PA.

Explain that for actual values only the top-down method *not assigned* is available.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Define order-related variances and their settlement to CO-PA
- Analyze the sales order with a cost collector
- Define top-down distribution
- Define periodic valuation

Order-Related Manufacturing – Variance Calculation

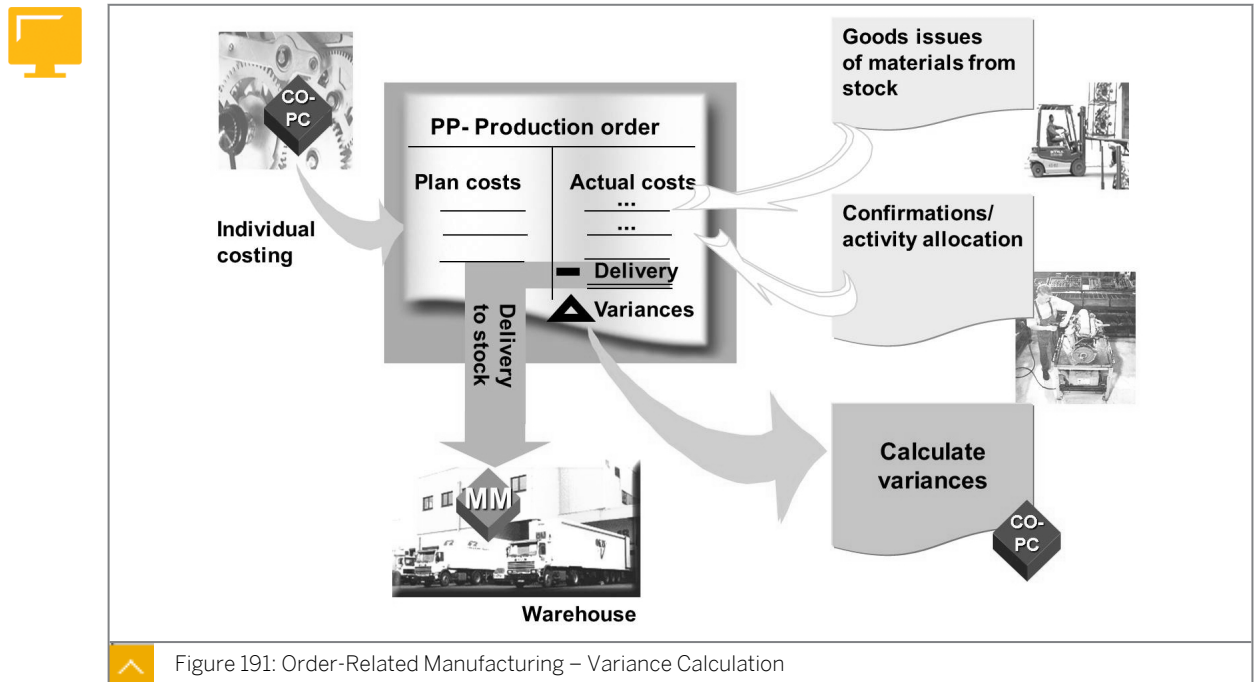


Figure 191: Order-Related Manufacturing – Variance Calculation

This slide demonstrates cost object controlling using the logistic scenario of order-related manufacturing. The controlling view is “controlling by lot size”.

When the cost object is created, a preliminary cost estimate will be carried out automatically to calculate the planned costs for the cost object.

The following types of costs are incurred at different stages of production and processing:

- Actual costs are incurred when materials from stock or activity types of cost centers are consumed.
- Primary costs can be posted directly from the other system components to the production order.
- Process costs can be incurred by allocating process quantities using the process template.

Because the related costs are posted to the production order at the same time as the consumption of materials and activity, production order costs can be analyzed and reviewed at any time.

When the produced goods are delivered to stock, the cost object is credited with the value of the delivered quantity and the goods are capitalized in the inventory. Depending on the method of price control, this can result in a revaluation of the finished goods inventory. In this example, you use a standard price-controlled material.

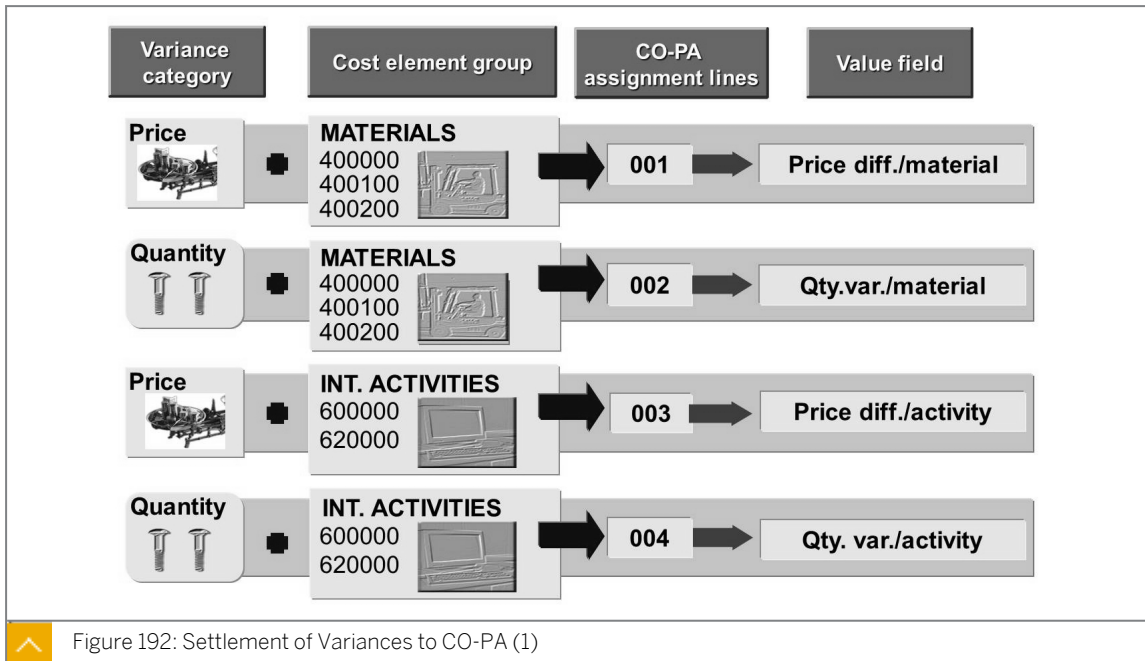
After finishing the production process or at the end of the period, the production order is settled to a price difference account.

In addition, the following period-end closing activities may be performed:

- Calculation of overhead
- Calculation of work in process (WIP)

- Calculation of variances

Settlement of Variances to CO-PA (1)



You can settle or transfer the production variances calculated in Product Cost Controlling (CO-PC) for both final production orders and schedule headers periodically to CO-PA. The individual variance categories, such as material price variance and material quantity variance, can be transferred separately.

A PA transfer structure consists of one or more items called assignment lines. In assignment lines, you assign a cost element group and a variance category to a value field of the operating concern. To ensure correct settlement to CO-PA, assign each combination of cost element group and variance category to one value field.

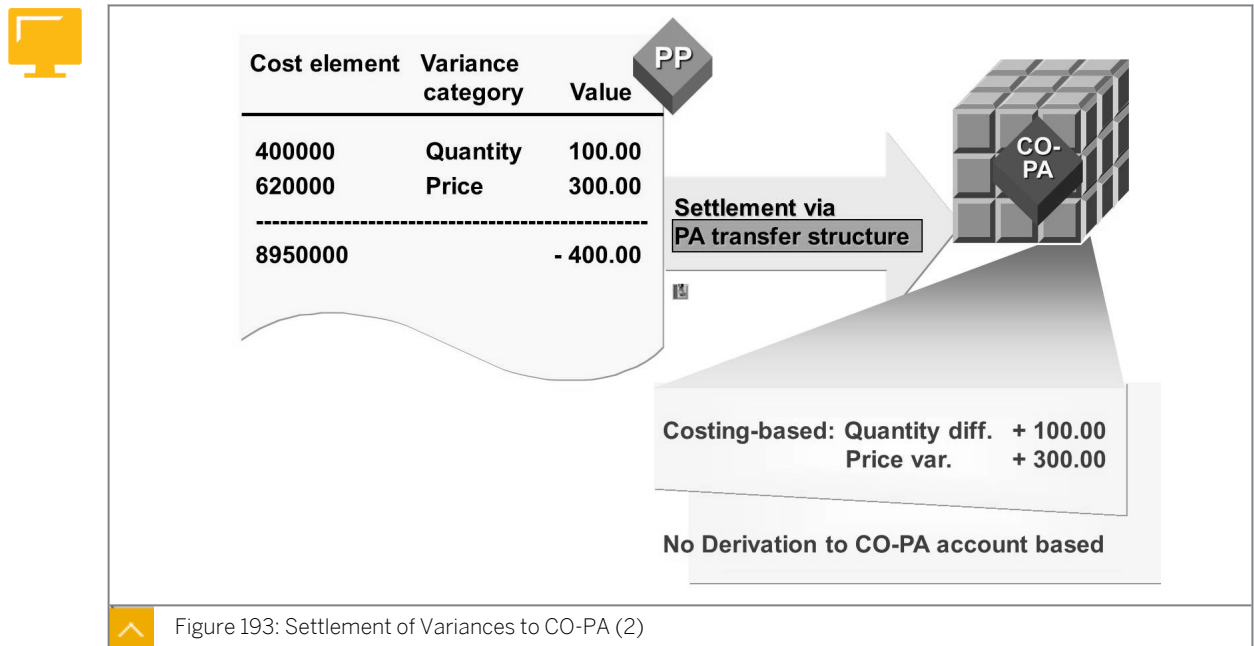
The requirements to define a PA transfer structure are as follows:

- Every debit cost element must be in the PA transfer structure. You can either group all the cost elements into a cost element group or define a number of groups for materials, internal activities, business processes, and other overhead costs. These groups are entered in the cost element area.
- Every variance category must be represented in the PA transfer structure. The variance categories are specified by the system and are entered under the source section.
- Each debit cost element or combination of cost element group and variance category can be assigned to only one value field.

Make sure that the following requirements are met for valuation:

- The current standard cost estimate is selected for valuation in CO-PA.
- The cost components of the standard cost estimate are linked to value fields.

Settlement of Variances to CO-PA (2)



In account-based CO-PA, variances are updated based on the definition of the price difference account. This account must be defined as a cost element in Management Accounting so that variances are assigned to the profitability segment (general posting assignment logic). The account for the price difference posting is found automatically in operations.

In costing-based CO-PA, you can assign these variances to the different value fields according to variance categories and cost elements. To transfer variances, select the Variances flag in the settlement profile assigned to the relevant production order. The costs are again assigned to the value fields in a PA transfer structure, where you can assign variance categories and cost elements to the required value fields.

The system finds the profitability segment automatically in order settlement based on the information found in the production order and by using characteristic derivation.



Note:

Settlement to account-based CO-PA is not a standard but an option. Only the variances calculated in the target version 0 can be settled to a profitability segment.



How to Evaluate the Configuration of Production Order Variances




This is an optional demonstration.

1. Create a production order:

Field Name or Data Type	Value
<i>Material</i>	100-300
<i>Order Type</i>	PP01
<i>Production Plant</i>	1000


- a) Choose *Logistics* → *Production* → *Shop Floor Control* → *Order* → *Create* → *With Material*.



Note:
Enter the data from the table and choose *Continue*.

Field Name or Data Type	Value
<i>Quantity</i>	10
<i>End</i>	Current Date + 5 Days

- b) Release the order and save it. Note the order number and press ENTER to confirm any warnings that appear.
2. Create variances and issue materials to the production order.
- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Goods Movements* → *Goods Issue*.
- b) Choose the *To Order* pushbutton.
- c) Enter your production order number and click the *Adopt and Details* icon. Issue a quantity greater than the one suggested by the system and save.
3. To complete the order, enter a final confirmation. This will post the labor costs to the order and allow you to calculate variances.
- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Confirmation* → *Enter*.
- b) Enter your production order number and proceed to the confirmation screen. The yield to confirm is 10. Set the final confirmation indicator to automatic, which will mean that the finished product is received into inventory. Save the process.
4. You are ready to calculate and settle variances.
- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Period-End closing* → *Variances* → *Individual Processing: Your order number*.
- Target cost version: 000*
Current Period



Note:
Enter Controlling Area 1000, if necessary.

- b) Execute without test run. Show the individual variance categories by choosing the appropriate display variant. Save your calculation.
5. Settle your production order. Settling your production order will make an entry in the price difference account in FI and account-based CO-PA and post the variance detail by variance category in costing-based CO-PA.
- a) On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Shop Floor Control* → *Period-end Closing* → *Settlement* → *Individual Processing: Your order number*.
Current Period
Test Run: Deactivated
- b) Drill down to the account documents and show both the costing-based and account-based entry.
6. The last step is to demonstrate the settlement structure.
CO-PA Customizing → *Flows of Actual Values* → *Settlement of Production Variances* → *Define PA Transfer Structure for Variance Settlement: E1*.

Sales Order with a Cost Collector

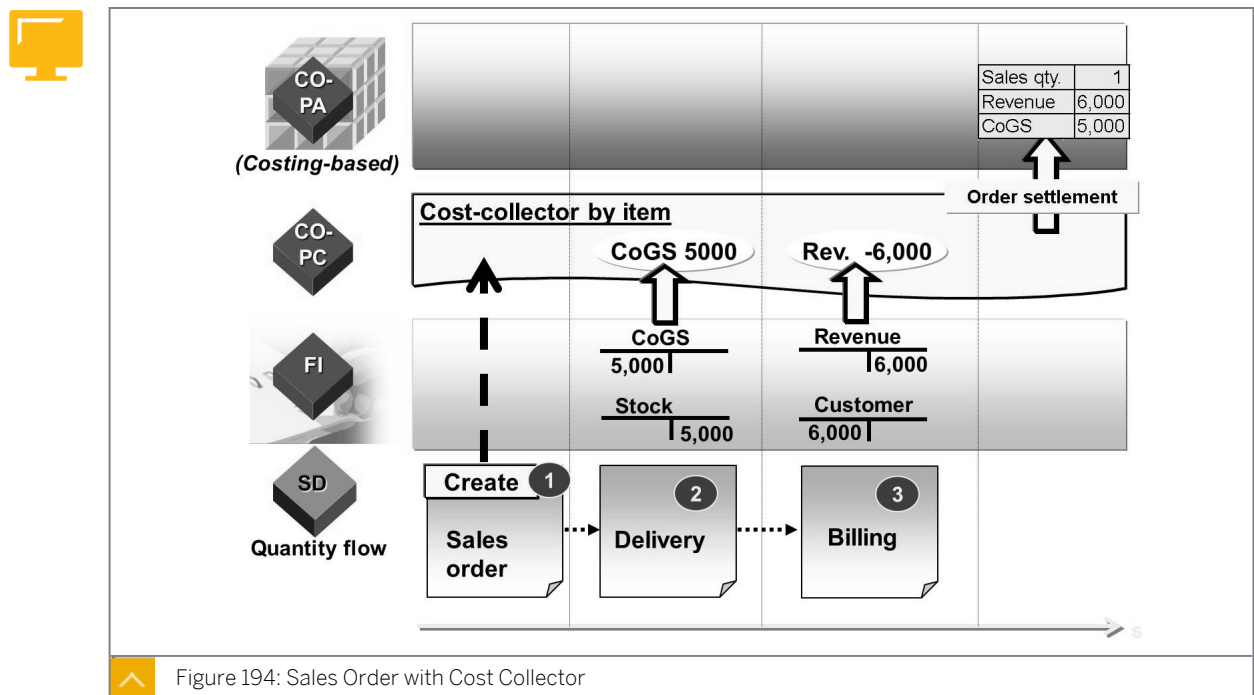


Figure 194: Sales Order with Cost Collector

In case of complex manufacturing procedures and the need for valuation of stock, you can use cost-bearing and revenue-bearing sales order items for the valued sales order stock. In complex Make-to-order (MTO) production, you must be able to monitor the progress of costs and revenues for a product that is manufactured for a specific customer.

If the costs and revenues are generated for a sales order item but you can use results analysis to calculate the cost of sales expected on the basis of the existing actual revenues. To transfer the costs and revenues for the sales order item to CO-PA, you must settle the item. The purpose of settlement is to pass the revenues, cost of sales, and any reserves for imminent loss for the item on to CO-PA for the period.

You can carry out results analysis using different methods.

For the nonvaluated sales order stock, you always use a cost-bearing and revenue-bearing sales order item. Consequently, in complex MTO manufacturing, you always control at sales order item level. It is recommended that you work with the valuated sales order stocks.



To Create a Sales Order with Cost Collector

1. Create a sales order for the material with the corresponding requirements class for the MTO material in transaction code `VA01`.

The following process takes place when the order is created:

- The system sets the status for MTO production for the sales order item.
 - A profitability segment in CO-PA is created to which costs and revenues for the sales order item can be assigned.
 - A settlement rule is created that assigns costs and revenue for the sales order item to the profitability segment.
 - A settlement profile containing control parameters for settlement is the default.
 - A results analysis key containing control parameters for results analysis is the default.
 - Pricing is carried out to calculate the net value of the order item.
 - The requirements class triggers a cost plan for the order.
 - The condition of the sales order gives you the revenue plan.
2. Optional: Display the sales order in transaction code `VA03` to view how the system calculated the net value. Select the item and then choose *Goto* → *Item* → *Conditions*. This value is interpreted as the planned revenue in results analysis.
 3. Optional: Display the sales order in transaction `VA03` to view the account assignment. Select the item and then choose *Goto* → *Item* → *Account assignment*. Check that the following requirements are met:
 - The costing sheet and the overhead key for the calculation of overhead
 - The profitability segment to which the costs and revenue are assigned

If you check the *Detail* indicator and press ENTER, you can display the individual characteristics of a profitability segment.

4. Costs can be charged as a direct assignment to the sales order item or as alternative costs that can be collected on a production order. In either case, the production order is settled to the sales order in transaction code `CO88`.
5. Bill the sales order in transaction code `VF01`. This activity or transaction creates line items in FI and EC-PCA and posts actual revenue to the sales order. Nothing is posted to CO-PA at this time.
6. Execute results analysis as a part of the period-end closing activities. The execution of results analysis can be done for a single order in transaction code `KKK3` or collectively in transaction code `KKAK`.
7. Execute settlement in transaction code `VA88` as a part of the period-end closing activities. Record type C will be created in CO-PA.

Top-Down Distribution



Top-Down Distribution: Initial Screen

Processing instructions | Selection criteria | Value fields

Actual Data

From Period: 001.2006 to 012.2006

Record Type: F Billing data

All Valuation Views

Legal Valuation View

Profit Center Valuation View

Reference Data

From Period: 001.2006 to 012.2006

Version: []

Record type: F Billing data

Plan data

Actual data

Reference Curr.:

Use Source Data Curr.

Always Use Comp.Code Curr.

Always Use Op.Concern Curr.

Cumulate Periods

Cumulate Record Type

Reference base

Single val. fld

Value Field: Ordered quantity

By value fields

Handling of Negative Values

Delete Negative Values

Leave Values Unchanged

Scale Values

Options

Test run

Background Processing

Figure 195: Top-Down Distribution

In CO-PA, sales revenues, sales deductions, and costs of goods manufactured (COGM) are stored at the customer or product level. Many business transactions, such as freight invoices, insurance expenses, or advertising cannot be easily assigned to such an extensive level in CO-PA. These transactions must be posted at a summarized level, such as the division, sales organization, or company-code level.

Top-down distribution of actual data is a periodic function. This function enables you to distribute the aggregated data to extensive levels (such as the division level or the customer level in CO-PA), based on reference information (such as the data from the previous year). This function works in the same way as top-down distribution of plan data.

You can select the values posted to any profitability segments and value fields and then distribute this data to a predefined distribution level using the existing actual or plan data as the basis for this distribution. You can also distribute period by period or aggregate the period values to smooth out variances.



Note:

Top-down distribution can only be executed in the cost-based CO-PA. In comparison to the top-down distribution of plan data, only the method not assigned is available in cost-based CO-PA. Actual top-down distribution cannot be performed across business areas.



How to Perform a Top-Down Distribution with Actual Data

1. Create line items.

a) On the SAP Easy Access screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Actual Posting* → *Create Line Items* (KE21N).

b) On *Create Line Items: Initial Screen*, enter the following data:

Field Name or Data Type	Value
<i>Record Type</i>	F
<i>Posting Date</i>	Current date

Choose *Enter*.

c) On the *Enter Line Items (Legal View)* screen, choose the *Characteristics* tab and enter the following data:

Field Name or Data Type	Value
<i>Customer</i>	T-CO05A00
<i>Product</i>	P-100
<i>Company Code</i>	1000
<i>Plant</i>	1000

Choose the *Derivation* pushbutton.

d) On the *Value fields* tab page, enter **100** in the *Revenue* field and save the entry.

e) To create another line item, on the *Create Line Items: Initial* screen, press ENTER.

f) On the *Enter Line Items (Legal View)* screen, choose the *Characteristics* tab page and enter the following data:


Field Name or Data Type	Value
<i>Customer</i>	T-CO05A00
<i>Product</i>	P-101
<i>Company Code</i>	1000
<i>Plant</i>	1000

Choose the *Derivation* pushbutton.

g) On the *Value Field* tab page, enter **50** in the *Revenue* field and save the entry.

h) On *Create Line Items: Initial* screen, enter **A** in the *Record Type* field and choose *Enter*.

i) On the *Enter Line Items (Legal View)* screen, choose the *Characteristics* tab and enter **001** in the *Material Group* field.

- j) On the *Value field* tab page, enter **200** in the *Revenue* field. Save the entry and choose  (*Back*) to return to the *SAP Easy Access* screen.

2. Execute the top-down distribution.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Actual Posting* → *Period-End Closing* → *Top-Down Distribution* → *Execute* (KE28).
- b) On *Top-Down Distribution: Initial* screen, under the *Actual Data* pane, enter the following data:

Actual Data pane

Field Name or Data Type	Value
<i>From Period</i>	Current date
<i>To Period</i>	Current date
<i>Record Type</i>	A


Reference Data pane

Field Name or Data Type	Value
<i>From Period</i>	Current date
<i>To Period</i>	Current date
<i>Record Type</i>	F


Select the *Actual Data* radio button.

Under the *Reference Base* pane, choose *Revenue* in the *Value Fields* field.

Under the *Options* pane, deselect *Test run* and choose the *Processing Instructions* pushbutton.

- c) On the *Top-Down Distribution: Processing Instructions* screen, select the *Distribution Lvl* radio button for the *Product* field and choose the *Selection Criteria* pushbutton.
- d) On the *Top-Down Distribution: Selection Criteria* screen, enter **001** for *Material Group* in the *Char. Value From* column and choose the *Value Fields* pushbutton.
- e) On the *Top-Down Distribution: Value Fields* screen, choose the *Selection Criteria Deselect All* pushbutton to deselect all the *Name* fields. Select the *Revenue* checkbox. Choose *Goto* → *Variants* → *Save as Variant*.
- f) On the *Save Variant* screen, enter **TOPDOWNDEMO** in the *Variant* field and add the description **TOPDOWNDEMO**. Save the entry.
- g) On the *Top-Down Distribution: Value Fields* screen, choose  (*Execute*).
- h) On the *Log: Top-Down Distribution* screen, choose *Variant TOPDOWN DEMO-TOPDOWN* → *Period Current Date* → *Current Date*.

On the *Result* tab page, choose *Change layout*. In the *Change layout* dialog box, add *Period/Year* in the *Column Set*. Under *Distribution Runs*, you can also choose the *magnifying glass* to view the line items created.

- i) Choose the *Message* tab page. Choose  (*Back*) to return to the *SAP Easy Access* screen.

Periodic Valuation



Figure 196: Periodic Valuation

If you use parallel valuation (legal valuation together with profit center valuation), you can value the valuation views again separately in periodic valuation. With the correct settings, you can considerably reduce the runtime of the new valuation and the data volume if you want to value only one valuation view again.

The new selection criteria, *Document number* and *Reference document number*, allow you to value the selected documents, reference documents, or intervals between these documents. You can also exclude documents or intervals from the new valuation.



To Configure Periodic Valuation

1. In order to bring actual costing values into CO-PA, the following settings must be configured in product costing:
 - The application component *Actual Costing/Material Ledger* is activated for the relevant valuation areas.

In Customizing, choose *Controlling* → *Product Cost Controlling* → *Actual Costing/Material Ledger* → *Activate Valuation Areas for Material Ledger*.
 - Activate actual costing for the relevant valuation areas in Customizing, choose *Actual Costing/Material Ledger* → *Actual Cost* → *Activate Actual Costing*.
 - Activate the actual cost component split for the relevant valuation area in Customizing if you want the actual cost estimate in detail. Choose *Actual Costing/Material Ledger* → *Actual Costing* → *Activate Actual Cost Component Split*.

2. Decide how you would like the actual costing values to be copied and displayed. You have the following options:
 - You can copy the actual cost estimate as a total (just periodic transfer price) or in detail (periodic transfer price and actual cost component split).
 - You can overwrite the standard cost estimate with the actual cost estimate or you can create your own value fields for the actual cost estimate (in Customizing for CO-PA under *Structures* → *Maintain Value Fields*).

These two options can also be applied together. If you copy the actual cost estimate in detail, you can place the periodic transfer price, for example, in a value field of its own, while overwriting the standard cost estimate values with the actual cost component split. If you copy the actual costs in detail and want to place all values into new value fields, create the following value fields:

- A value field for the periodic transfer price
- An extra value field for each of the individual cost components (as with the value fields for the standard cost estimates)

If you have created new value fields, include them in the operating concern and then activate the operating concern (in Customizing for CO-PA under *Structures* → *Maintain Operating Concern*).

Create a valuation strategy for valuation using actual cost estimates and activate the *Material Cost Estimate* indicator. Assign this valuation strategy to point of valuation 02 (Periodic Revaluation).

3. Define a costing key for the actual cost estimate in Customizing for CO-PA under *Master Data* → *Valuation* → *Set Up Valuation Using Material Cost Estimate* → *Define Access to Actual Costing/Material Ledger*.
In the costing key, assign the periodic transfer price to the corresponding value field.
4. Assign the costing key for point of valuation 02 to a product, a material type, or using flexible access to any combination of CO-PA characteristics.
Use the corresponding activities in Customizing for CO-PA under *Master Data* → *Valuation* → *Set Up Valuation Using Material Cost Estimate*.
5. If you want to copy the actual cost component split in detail, assign the individual cost components to the corresponding value fields in Customizing for CO-PA under *Master Data* → *Valuation* → *Set Up Valuation Using Material Cost Estimate* → *Assign Value Fields*.
6. If required, define a profitability report to compare the value fields from the standard cost estimate with those from the actual cost estimate.
7. Once the costing run for periodic actual costing has been run in the material ledger, execute periodic valuation in CO-PA to copy the actual cost estimate into CO-PA.



LESSON SUMMARY

You should now be able to:

- Define order-related variances and their settlement to CO-PA
- Analyze the sales order with a cost collector
- Define top-down distribution

- Define periodic valuation



Learning Assessment

1. _____ is a representation in the system of some aspect of your daily pricing activities.

Choose the correct answer.

- A A condition type
- B A condition table
- C An access sequence

2. You can transfer the overhead cost for the cost centers and the business processes that are not allocated to the inventory by means of _____.

Choose the correct answer.

- A Cost center assessment
- B Periodic assessment
- C Process assessment
- D Cost assessment

3. Which of the following is required to execute a direct or indirect allocation of internal activities into Profitability Analysis (CO-PA)?

Choose the correct answers.

- A Cost center
- B Profitability segment
- C Quantity of the activity performed
- D Profit center

4. Which of the following options do you use to configure the value field charged in an Activity Allocation?

Choose the correct answer.

- A Settlement profile
- B Settlement structure
- C PA transfer structure
- D Source structure

5. When you create an order, you need to specify _____ so that the system can determine which settlement profile and, as a result, which settlement structure and PA transfer structure to use.

Choose the correct answer.

- A a company code
- B a profit center
- C an order type
- D a cost center

6. In costing-based Profitability Analysis (CO-PA), costs are settled to the settlement cost element.

Determine whether this statement is true or false.

- True
- False

7. Which of the following analyses defines the expenses related to the revaluation of material inventories?

Choose the correct answer.

- A Management Analysis
- B Profit Center Analysis
- C Profitability Analysis (CO-PA)
- D General and Administrative Analysis

8. If a cost center and profitability segment are charged on the same posting, the real posting goes to which of the following entities?

Choose the correct answer.

- A Cost center
- B Administrative center
- C Material management segment
- D Profitability segment

9. A PA transfer structure consists of assignment lines where a _____ is assigned.

Choose the correct answer.

- A profit element group
- B cost element group
- C management element group
- D product element group

10. To calculate the cost of sales expected on the basis of the existing actual revenues, you can use _____.

Choose the correct answer.

- A cost-bearing sales order item
- B revenue-bearing sales order item
- C results analysis
- D valuated sales order stocks

11. Where can we perform top-down distribution for actuals?

Choose the correct answer.

- A Costing-based PA
- B Profit-based CO-PA
- C Profit Center Accounting
- D Management Accounting

12. If you use parallel valuation (legal valuation with profit center valuation), you can value the valuation views again in periodic valuation.

Determine whether this statement is true or false.

True

False



Learning Assessment - Answers

1. _____ is a representation in the system of some aspect of your daily pricing activities.

Choose the correct answer.

- A A condition type
- B A condition table
- C An access sequence

2. You can transfer the overhead cost for the cost centers and the business processes that are not allocated to the inventory by means of _____.

Choose the correct answer.

- A Cost center assessment
- B Periodic assessment
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3. Which of the following is required to execute a direct or indirect allocation of internal activities into Profitability Analysis (CO-PA)?

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Determine whether this statement is true or false.

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- False

7. Which of the following analyses defines the expenses related to the revaluation of material inventories?

Choose the correct answer.

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- B Profit Center Analysis
- C Profitability Analysis (CO-PA)
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8. If a cost center and profitability segment are charged on the same posting, the real posting goes to which of the following entities?

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- C Profit Center Accounting
- D Management Accounting

12. If you use parallel valuation (legal valuation with profit center valuation), you can value the valuation views again in periodic valuation.

Determine whether this statement is true or false.

True

False

Lesson 1

Evaluating the Profit Planning Process

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Lesson 2

Outlining Planning Methods

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Exercise 30: Create Manual Planning Functions

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UNIT OBJECTIVES

- Perform the steps necessary to plan in CO-PA
- Perform planning manually and using automatic planning



Evaluating the Profit Planning Process

LESSON OVERVIEW

This lesson explains how to design the overall process of profit planning. In addition, the lesson provides an overview of the basic terminology of Profitability Analysis (CO-PA) planning, the procedure for creating a planning level, and planning layouts.



Explain the business background for the sales planning process. Initially, a corporate goal is set at a high level within a company. This goal drives the overall sales budget from a revenue and quantity standpoint. A breakdown of the budget to the lower levels in the company in turn drives the product budget, if applicable, which then drives the direct production costs. In the next step, the overhead expenses are added to the direct costs, which in turn yields the complete contribution margin plan. You can then break down the plan to any level of detail.

Business Example

The following users want to access the CO-PA module for their respective planning purposes:

- Sam Sales and Randy Revenue want to use the CO-PA module to plan the sales of bicycles and motorcycles, the two main product lines of the company. Sam wants to plan his sales according to customer and product. He wants to plan the sales quantities and selling prices for each customer and product combination and he expects the system to calculate the planned revenue from the results. Randy wants to plan his sales according to product group. He wants to use the system to distribute the planned values to the product level automatically using a reasonable allocation basis.
- Mr. Miller is interested only in the planning quantity and plan revenues. The product managers would like to perform what-if analyses on the planning data for various scenarios to analyze possible effects of strategic decisions on revenues. For example, they may want to analyze the effect that price increase might have on revenue.
- Peter Plant wants to use the projected sales quantities from CO-PA to plan his production and material procurement schedules. He would like to have access to the CO-PA plan values in Sales and Operations Planning (SOP). For this reason, planning quantities, prices, and revenue at customer and product level are required.

The company requires knowledge of the following profit planning processes in CO-PA and its implementation:

- Planning at the product group level with the systematic distribution of values to the product level
- Mass changes to plan values in order to analyze possible business scenarios
- Ability to transfer the CO-PA plan data to SOP for production scheduling

For this reason, you require the following knowledge:

- An understanding of the profit planning process
- An understanding of the steps required to plan in CO-PA



Planning levels are new as of Release 4.6 onwards. Explain that these levels would be set up by a planning coordinator or administrator. Using planning levels and packages provides the planner with the characteristics or characteristic values required.

For example, the goal is to establish a full contribution margin plan for a division. The sales force will provide the quantity and revenue plan figures, the sales managers will add selling expenses, and the planning coordinator will complete the plan with direct costs and other overheads. Each of the following planners needs a different view of the planning data:

- Salesperson
Customers for their territory, revenue, and quantity
- Sales manager
Divisions they manage, quantity, revenue, discounts, and cost
- Planning coordinator
Sales organization, division, quantity, revenue, discounts, direct costs, and overheads

In addition, mention the importance of the versions that are needed to accomplish any type of planning. Versions are valid throughout Controlling and across all the operating concerns. In CO-PA, versions are used to enter and store different plan data for profitability segments. As a result, in the general version definition function for CO-PA, the Actual Exclusive use fields are irrelevant.

Each version incorporates the settings that are made in reference to the plan version of an operating concern. These attributes determine the following information:

- Whether planning is allowed for the plan version?
- Which currency is used to manage the data for the version?
- Which exchange rate is used to translate the foreign currency amounts into the operating concern currency?
- Whether the characteristic derivation logic is checked when you enter the plan data?



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Perform the steps necessary to plan in CO-PA

The Profit Planning Process

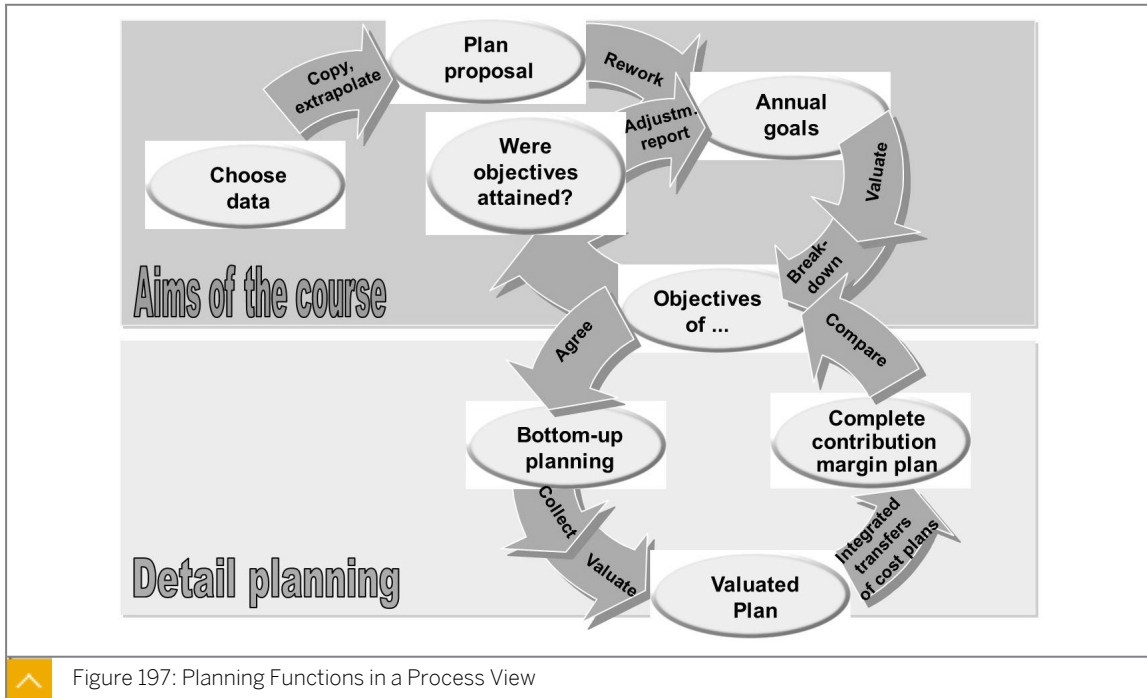


Figure 197: Planning Functions in a Process View

Sales and profit planning is an integrated process involving various roles within profitability and sales accounting, such as sales manager, regional manager, and sales employee. Planners can use various planning approaches, such as central top-down planning and local bottom-up planning.

The planning tool in CO-PA offers planners a conglomerate, uniform, modern, and straight forward graphical planning interface. This interface ensures that the power user, such as the central planner, who models and monitors the planning process, and occasional users, who only occasionally confirm planning values, can work together.

The contents and level of information of individual plans vary depending on the planner's role and area of responsibility. For this reason, the planning screen in CO-PA allows you to structure planning selectively according to specific planning levels and planning contents, and assign that planning structure to individual users.

Your planning structure is represented in a tree hierarchy. From the initial planning screen, you can execute almost all the planning functions, from modeling the planning process and monitoring the planning tasks to the manual entry of the planning data.

Planning in CO-PA

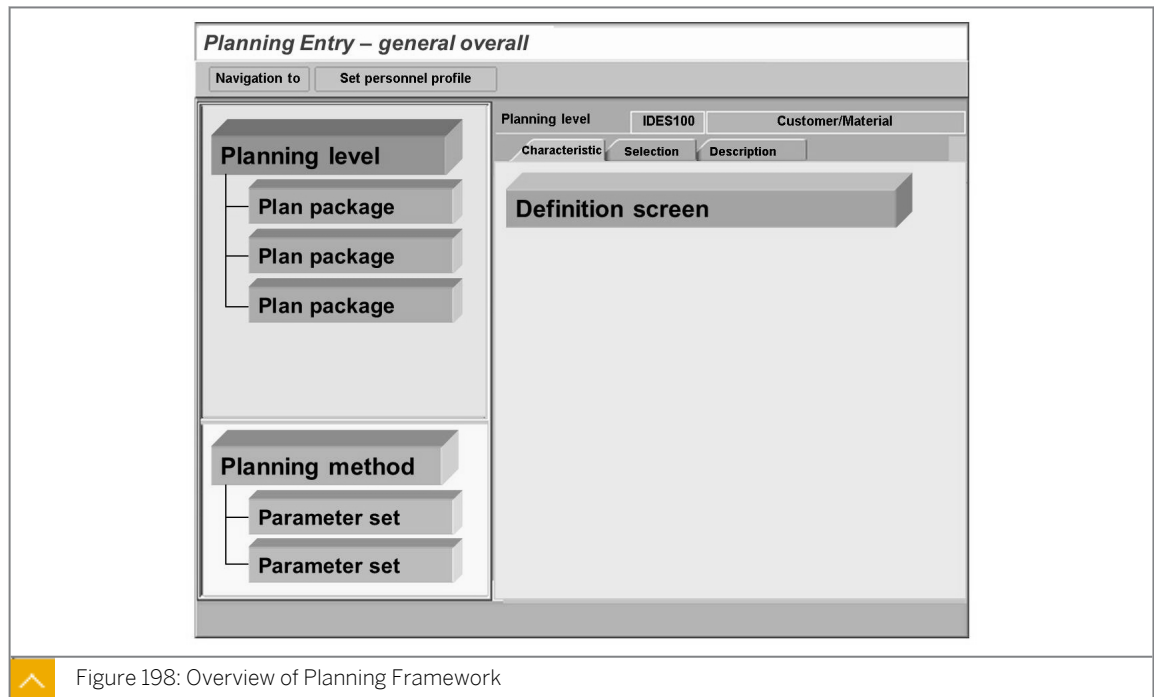


Figure 198: Overview of Planning Framework

Taking into account a typical sales and profit planning process, a professional planning tool must have the following functionalities:

- Support for the individual planners by guiding them to the planning levels needed for planning (for example, a key account manager plans on the key customer, sales organization, and product level).
- Support for the individual planners by providing personalized access to the required plan data using planning packages.
- A set of relevant planning functions, such as valuations and simulations, to apply the required planning packages using planning methods and parameters.

Manual Planning – Access to the Overview Screen

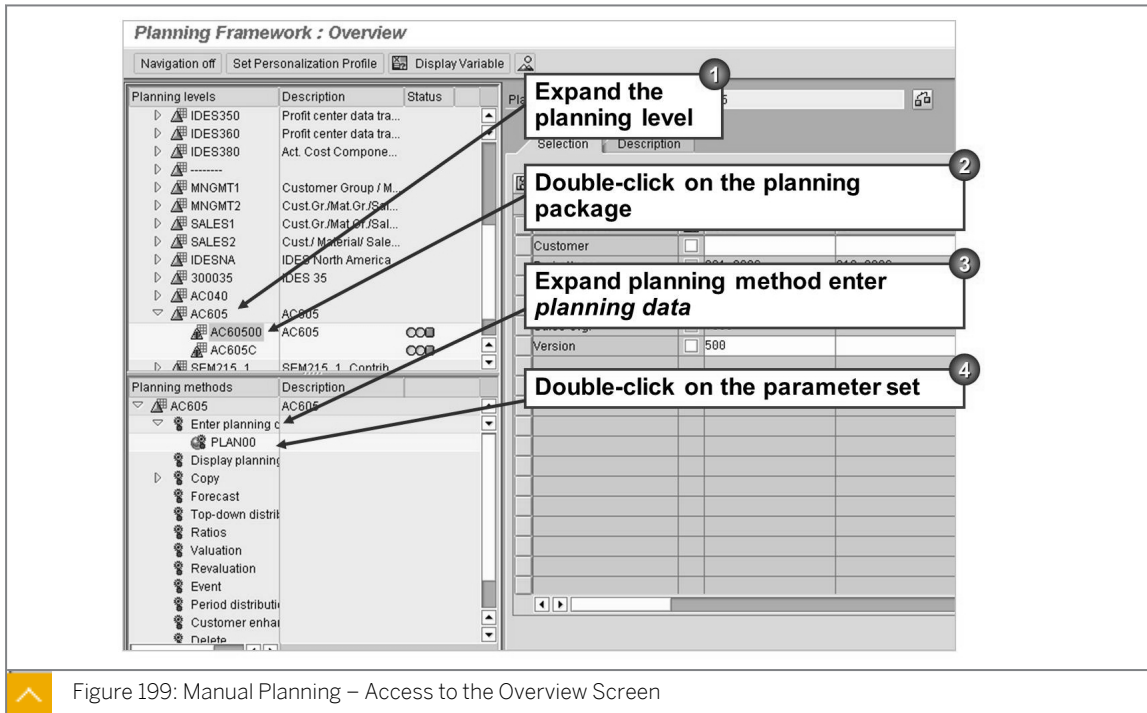


Figure 199: Manual Planning – Access to the Overview Screen

This figure shows the steps to perform manual planning.



How to Create a Planning Version



Demonstrate the steps listed in the Create Manual Planning Functions exercise.



How to Display Planning Levels and Create Planning Packages and a Parameter Set



Demonstrate the steps listed in the Create Manual Planning Functions exercise.



LESSON SUMMARY

You should now be able to:

- Perform the steps necessary to plan in CO-PA



Outlining Planning Methods

LESSON OVERVIEW

This lesson outlines how to create manual plan data using various planning methodologies. In addition, it also explains how to create forecasts and perform top-down distribution of planning data. Furthermore, this lesson shows how to change and delete plan data.

Business Example

The management of your company wants to implement a profitability accounting application in your SAP system. As a member of the project team, you must recommend whether to implement Profitability Analysis (CO-PA) or classic Profit Center Accounting (EC-PCA). You will be responsible for implementing the selected applications.

The following users want to access the CO-PA module for their respective planning purposes:

- Sam Sales and Randy Revenue would like to use the CO-PA module to plan the sales of bicycles and motorcycles, the two main product lines of the company. Sam wants to plan his sales according to customer and product. He wants to plan the sales quantities and selling prices for each customer and product combination, and he expects the system to calculate the planned revenue from the results. Randy wants to plan his sales by product group and then use the system to distribute the planned values to the product level automatically using a reasonable allocation basis.
- Mr. Miller is only interested in plan quantity and plan revenues. The product managers would like to perform what-if analyses on the plan data for various scenarios to analyze possible effects of strategic decisions on sales. For example, they might want to analyze the effect that pricing increases might have on revenue.
- Peter Plant wants to use the projected sales quantities from CO-PA to plan his production and material procurement schedules. He would like to have access to the CO-PA plan values in Sales and Operations Planning (SOP). For this reason, planning quantities, prices, and revenue at customer and product level are required.

The company requires knowledge of the following profit planning processes and their implementation:

- Planning at the product group level with the systematic distribution of values to the product level
- Mass changes to plan values in order to analyze possible business scenarios
- Ability to transfer the CO-PA plan data to SOP for production scheduling

For this reason, you require the following knowledge:

- An understanding of the profit planning process and the phases in sales planning



Introduce the various planning methods. You have to introduce the planning functions within the planning business process to help understand why a particular function may be used. The process can be iterative and is performed by various functions within a corporation. The planning coordinators administer these functions.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Perform planning manually and using automatic planning

Manual Planning

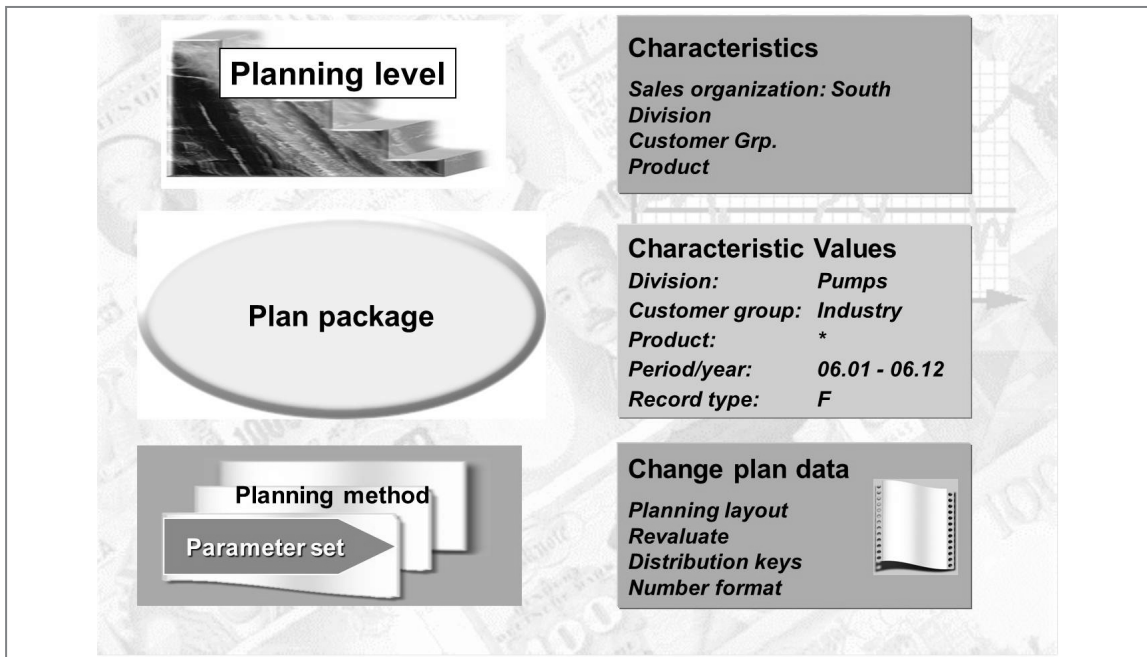


Figure 200: Elements in Planning

Planning in CO-PA can be executed on several levels, such as product group and product level, customer or product level, or customer level. In fact, you can also plan on any profitability segment in CO-PA.

The system ensures that data remains consistent across all levels throughout the planning process. Although changes are made on various levels during the planning process, the values from these levels are reconcilable because the subtotals of these levels add up to totals.

For example, you enter planned quantities at customer or product level for two customers and three products. Then, by definition, the total by product equals the customer or product information. If additions are made at product level, the additions are displayed at customer or product level with an unassigned customer.

Derivation is automatically carried out in the background when the plan data is saved. As a result, the values planned under one or more characteristic values are also automatically summarized under other higher-level characteristics.

For example, you have added the product group characteristic to the operating concern. When you plan at product level, the values are automatically rolled up under the appropriate

product groups, although no product group was specified while entering the plan data. This roll-up happens automatically at every location where the derivation occurs.

Planning Layout 1

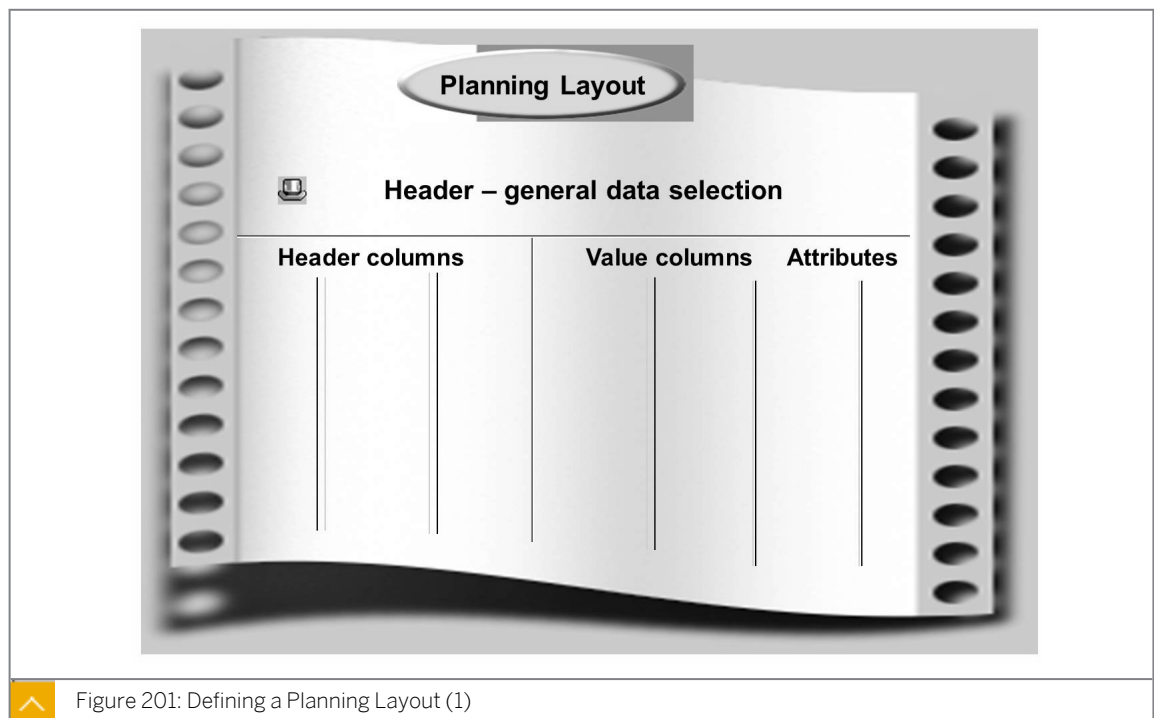


Figure 201: Defining a Planning Layout (1)

Planning layouts are customized screens for entering plan data. The definition of a planning layout controls not only the appearance of the Planning screen, but also some of its functions allowing complete flexibility in controlling the planning entry process.

A planning layout definition consists of the following parts:

- General data selection
 - In this part, the characteristic values that are valid for the entire layout are specified.
- Lead columns
 - In these columns, additional characteristics that need to be planned are specified.
- Value columns
 - In these columns, characteristic or value field combinations are specified.

Each row and column intersection in a planning layout definition requires valid values for the special characteristics version, record type (for costing-based CO-PA), and the plan or actual indicator. When these values are employed in the layout design, layouts can be created in which the values can be planned for multiple versions at a time, and in which history data can be displayed for reference.

Variables can be used when defining planning layouts to give them maximum flexibility. Variables can be used for any characteristic and they can be installed in rows, columns, or the general data selection. Users will be prompted to enter the values for these variables when planning.

Separate planning layouts are required for costing-based CO-PA and account-based CO-PA, because planning figures on the two sides of CO-PA are not related or linked.

When defining layouts in costing-based CO-PA, the characteristic record type is necessary.

General Planning Layout

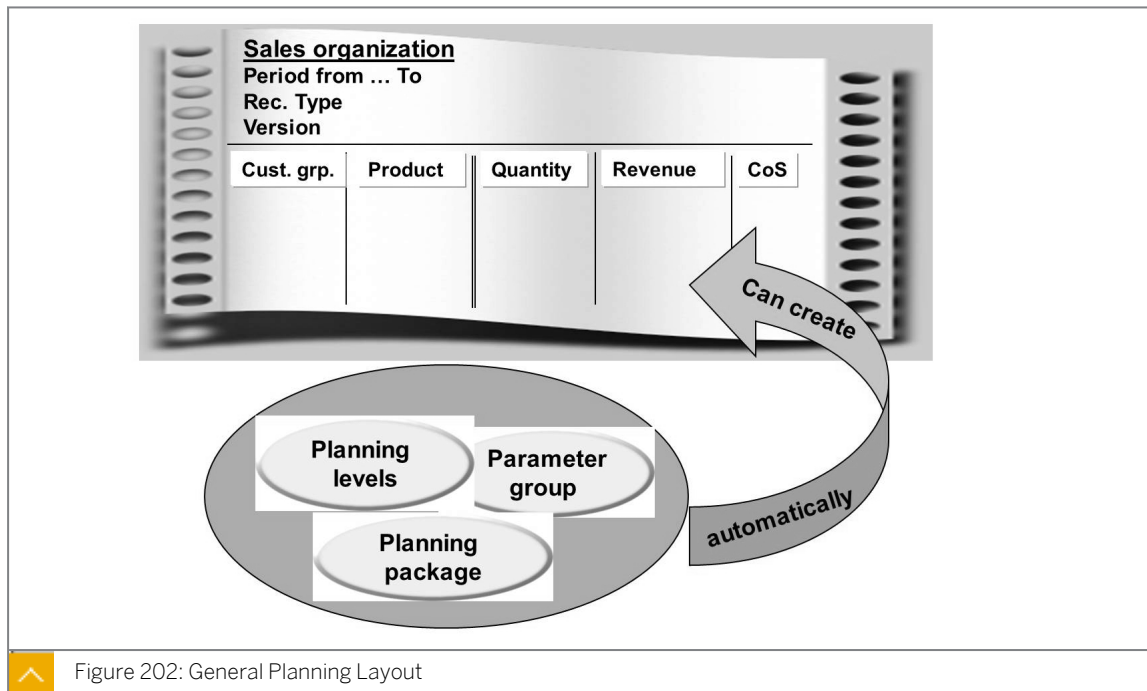


Figure 202: General Planning Layout

A general planning layout that corresponds to the selections made in the plan level and package can be created automatically. Specific layout features can be maintained manually.

The basic options for defining the lead columns are as follows:

- Each row in the lead column can be defined separately and consists of a combination of characteristic values (in this case, the columns are value columns) or each row is a value row (in this case, the columns are characteristic values).
- The entire lead column can be selected to represent a characteristic (the columns are value columns). With this option, you can obtain multiple lead columns but you cannot hard-code any rows.

Value columns are defined using characteristics, value fields, attributes, and formulas. If the lead column contains only characteristics, each value column must at least contain a value field. The column can also contain characteristic values pertaining to the value field.

The following attributes can be tagged to each value column:

- A distribution key for distributing the summarized values to periods
- A unit for the value field (either a currency or a unit)
- A long text indicator (indicating that long text can exist)
- All characteristics

Planning Variables

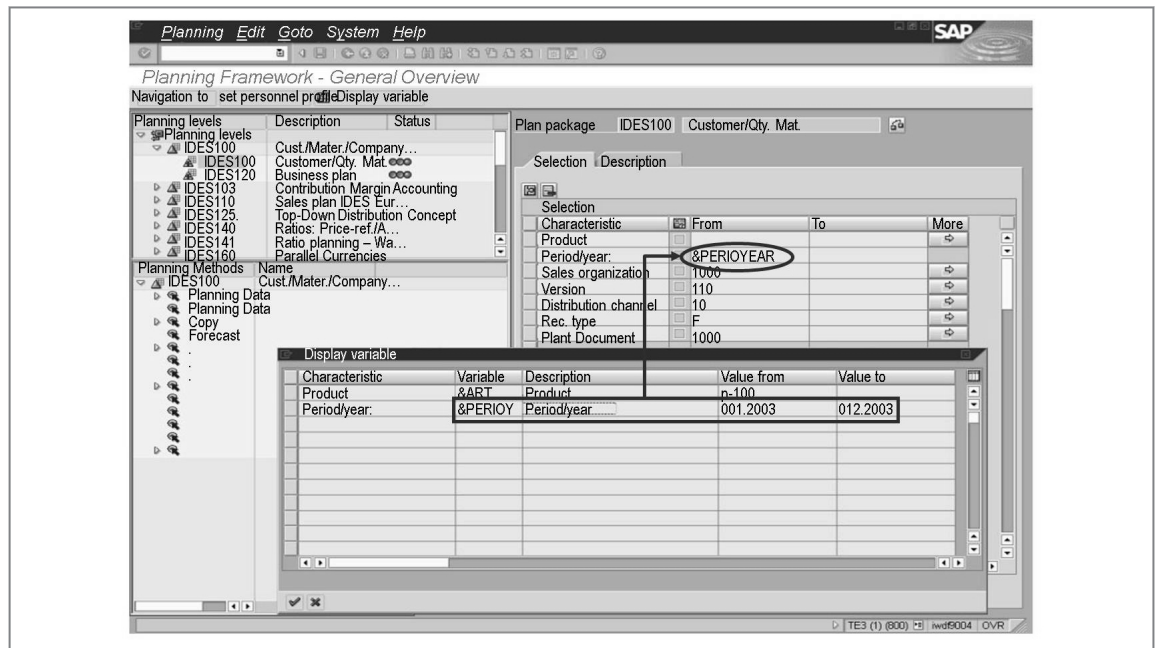


Figure 203: Planning Variables

You can define the variables for your planning levels and planning packages.

For example, you can use a variable instead of a planning package to specify the planning period.

You can use all the planning packages for planning runs in subsequent fiscal years without the need to change each planning package. Instead, you can change the characteristic of the variable centrally.

You can maintain variables directly from the Planning screen by choosing *Edit* → *Variable*.

Planning Methods

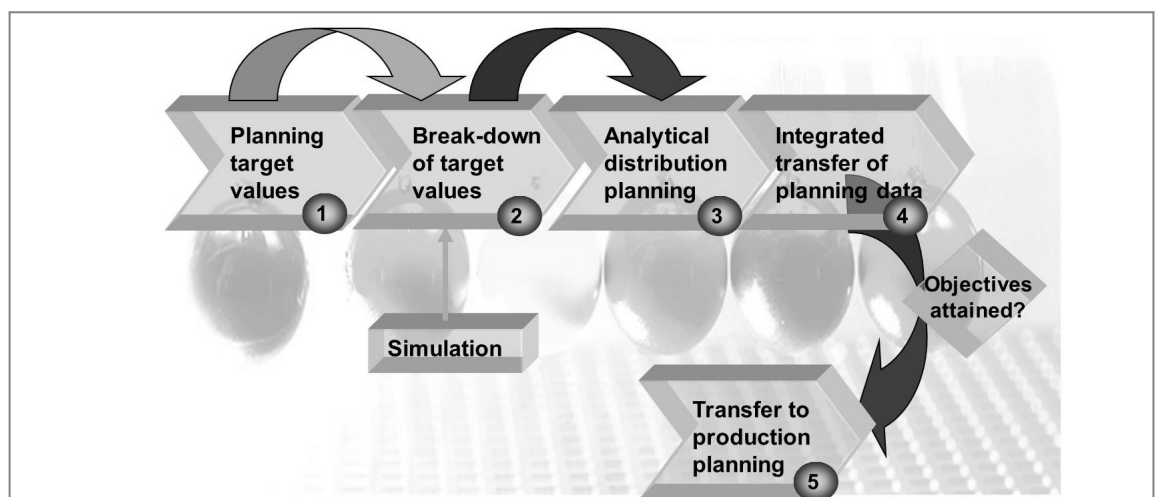


Figure 204: Typical Phases in Sales Planning

The figure shows an example of one possible integrated process for sales and profit planning.

The sales planning process consists of the following phases:

1. Planning of target values, such as at material group level. Average prices and cost of goods manufactured can be determined at this stage.
2. Plan data is distributed top-down. The plan data for material groups is broken down into combinations of customer groups and products.
3. In bottom-up planning, the plan data is entered manually for each sales representative and then combined in a single plan version.
4. Additional plan data is transferred to sales and profit planning from other business areas, such as Cost Center Accounting (CO-CCA) or incoming orders.
5. After planning has been finalized, the plan data is transferred to production planning, allowing production plan data to be reconciled with sales planning.

Planning Target Values



By means of ratios, which are quotients of two value fields used directly in the planning layout, you can calculate prices quickly and simply, and simulate price, value, and quantity changes.

You can use ratios and ratio schemes, which are similar to costing sheets, to value your current plan version with the average prices from reference data, such as the actual data or another plan version. This process allows you to plan prices and quantities separately and simultaneously use the valuation prices for quantity planning. This function is available for both manual planning and automatic planning.

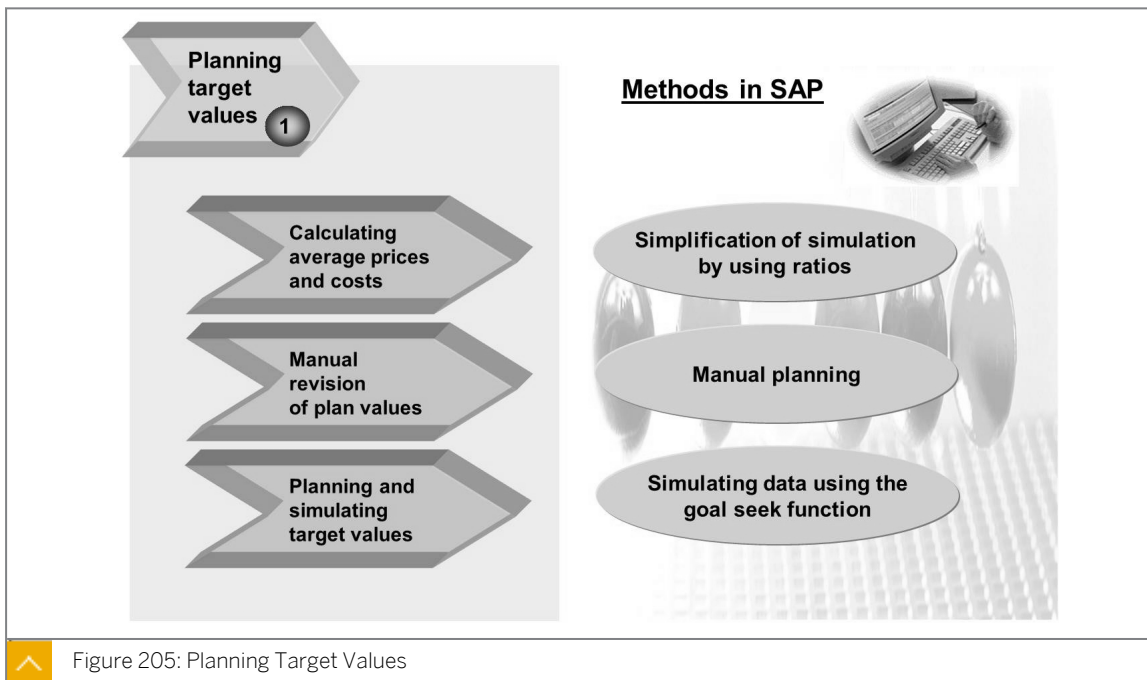
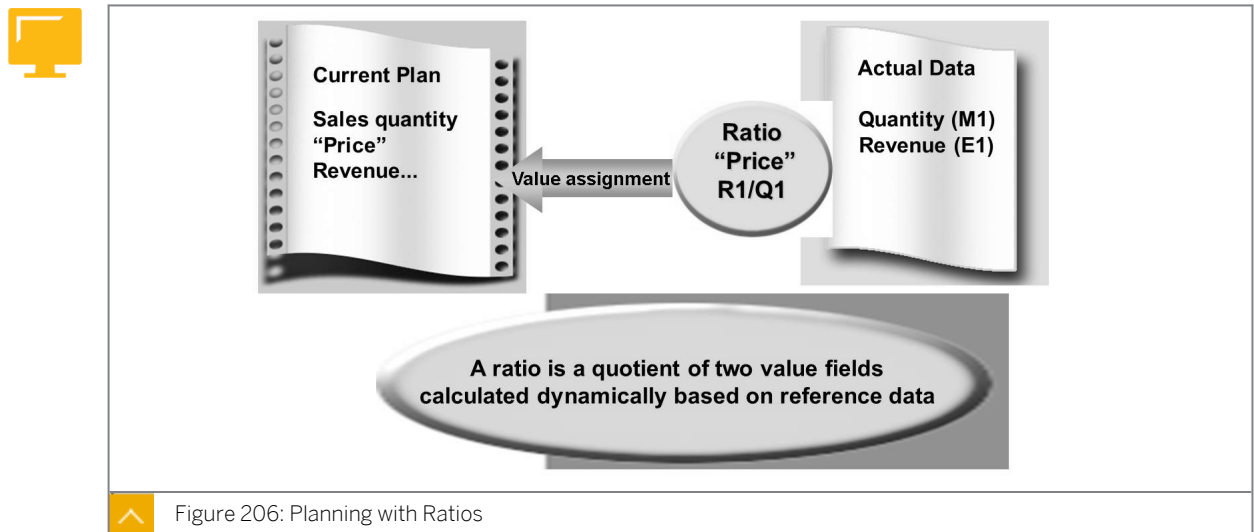


Figure 205: Planning Target Values

At the start of the first planning phase, in which you plan target values, you define average prices and the cost of goods manufactured. Introducing ratios helps simplify planning prices manually. With the Goal Seek function, you can enter the target revenue, and the system calculates the planned price required to attain it.

Planning with Ratios

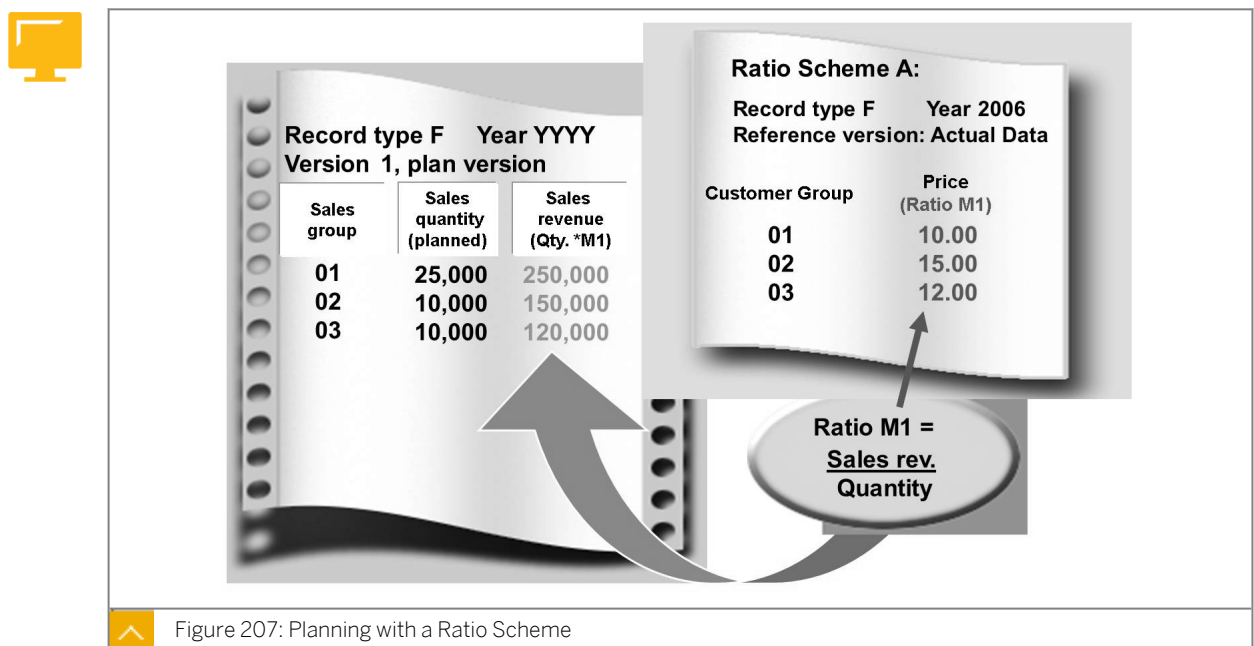


A ratio is a quotient involving two value fields, such as price = sales/quantity, and it can be used as a basis for simulating corresponding adjustments and alterations of quantities and prices in the planning layout.

You can define ratios centrally in Customizing. They can be selected in the same way as normal value fields when you define the planning layout.

Ratios or prices are not saved on the database. Instead, they are calculated dynamically from the quantities and values at each planning level to avoid the build-up of redundant data and ensure a consistent dataset.

Planning with Ratio Scheme



Ratios are summarized in a ratio scheme. These schemes can be applied against existing plan data to value the existing plan base values with ratio values, or the rates calculated based on specific reference data. The reference data can be the actual data or data from another

planning version. For example, if a ratio scheme contains a ratio for per-unit price, you can use a ratio scheme to value a sales quantity plan and determine the price for each piece from the actual data.

You can use ratio schemes in both manual and automatic planning. In manual and automatic planning, you can indicate the ratio scheme and reference data (plan data or actual data, plan version, record type, and reference time interval). In automatic planning, ratio schemes can be applied using the *Copy* and *Change* functions.

Reaching Objectives Using Goal Seek

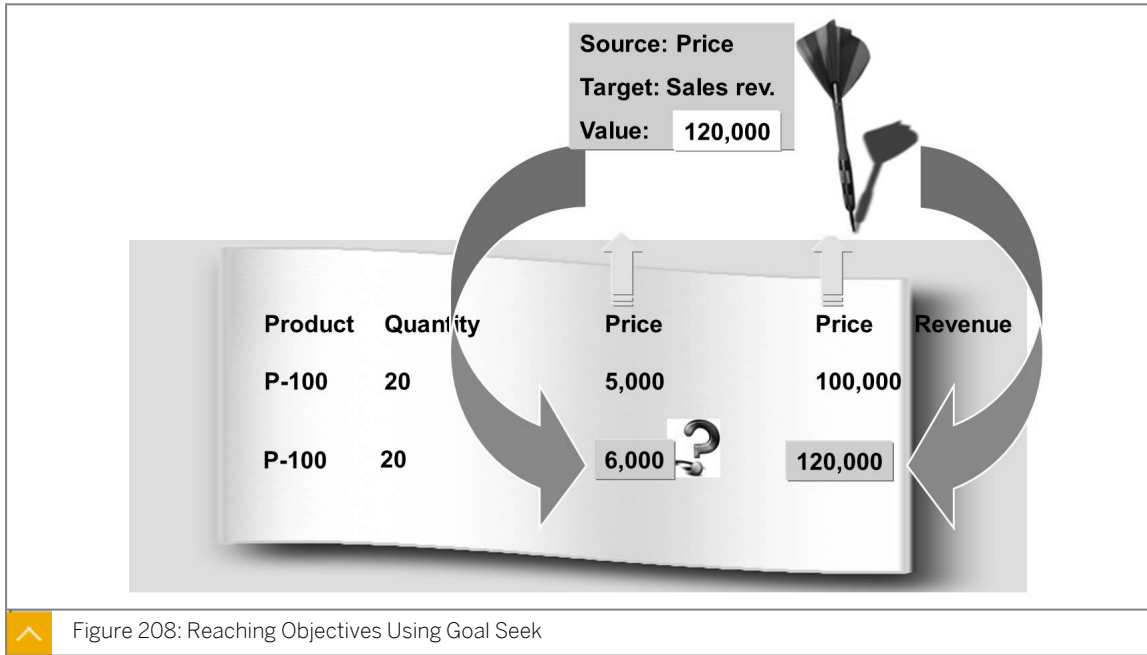


Figure 208: Reaching Objectives Using Goal Seek

You can perform data simulations in planning using the Goal Seek function. This function allows you to enter a target contribution margin in manual planning, and enables the system to calculate the corresponding quantity sold.

To use the goal seek function, both sides of relevant data cells must be mathematically inclined, that is, as a formula or as a ratio. In the figure, ratios which are hidden in the layout create the relationship between the contribution margin and the quantity sold. To carry out the Goal Seek function, first select the two relevant data cells and choose *Edit -> Goal Seek*.

In the dialog box that appears, enter the target value, such as a contribution margin of 120,000. The system then calculates the appropriate quantity, which in this case is 6,000 items.



How to Configure Manual Planning Layouts



Demonstrate the steps listed in the Create Manual Planning Functions exercise.

Top-Down Distribution

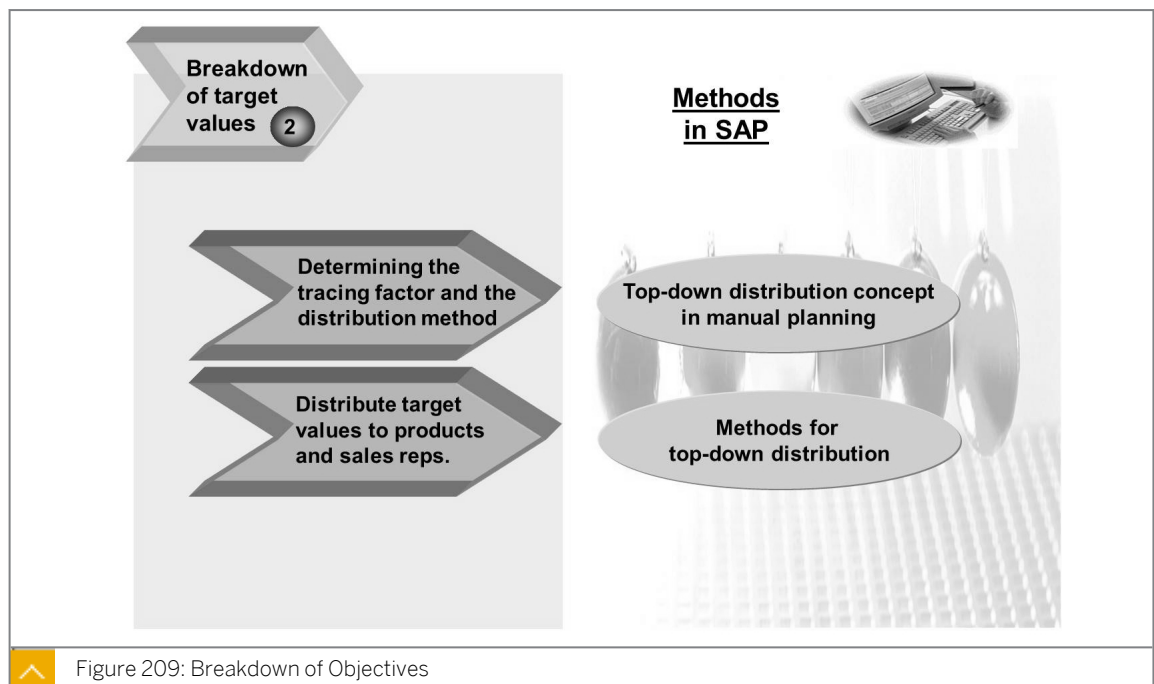


With the top-down distribution function, you can distribute the data from a higher planning level to the underlying levels. You can initially plan on the product group level and then break the plan down into products. The plan data is distributed in the same way as the existing reference data. Both plan data and actual data can be used for distribution. You can distribute the data for a certain period or based on the accumulated period values to smooth out fluctuations.

Top-down distribution in Planning

Method: Distributing non-assigned values

Method: Distributing total values



You can use an extensive top-down distribution function, available in manual and automatic planning, for the second planning phase, which involves the top-down distribution of the target values to an extensive planning level.

Top-Down Distribution in Planning

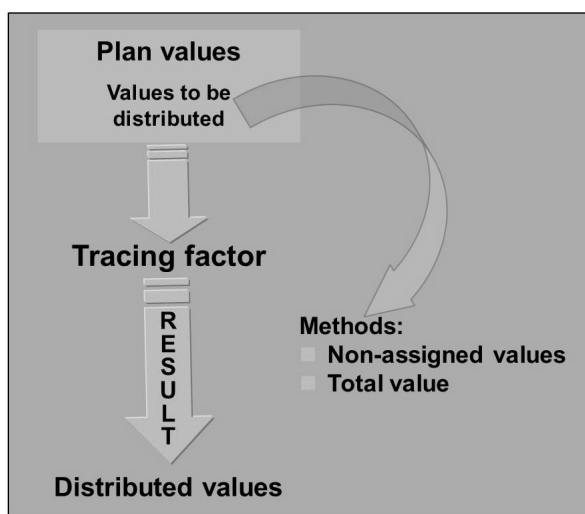


Figure 210: Top-Down Distribution in Planning

Top-down distribution is a process for distributing data that has been planned at one level in CO-PA to the additional levels based on reference data, which can be plan or actual CO-PA data. Top-down distribution can only be used in automatic planning.

An example of top-down distribution is planning values at product group level, and then distributing these values to the individual products in a group. Another example is planning values at product level, and then distributing these values to the plants from which the products are sold.

Plan values can be distributed strictly according to the reference data by period or the reference data aggregated across periods. Reference data aggregated across periods equalizes the distribution percentages across periods for the receivers.

When performing a top-down distribution, specify the field(s) in the reference data. The values of the reference data field(s) are used as the reference base.

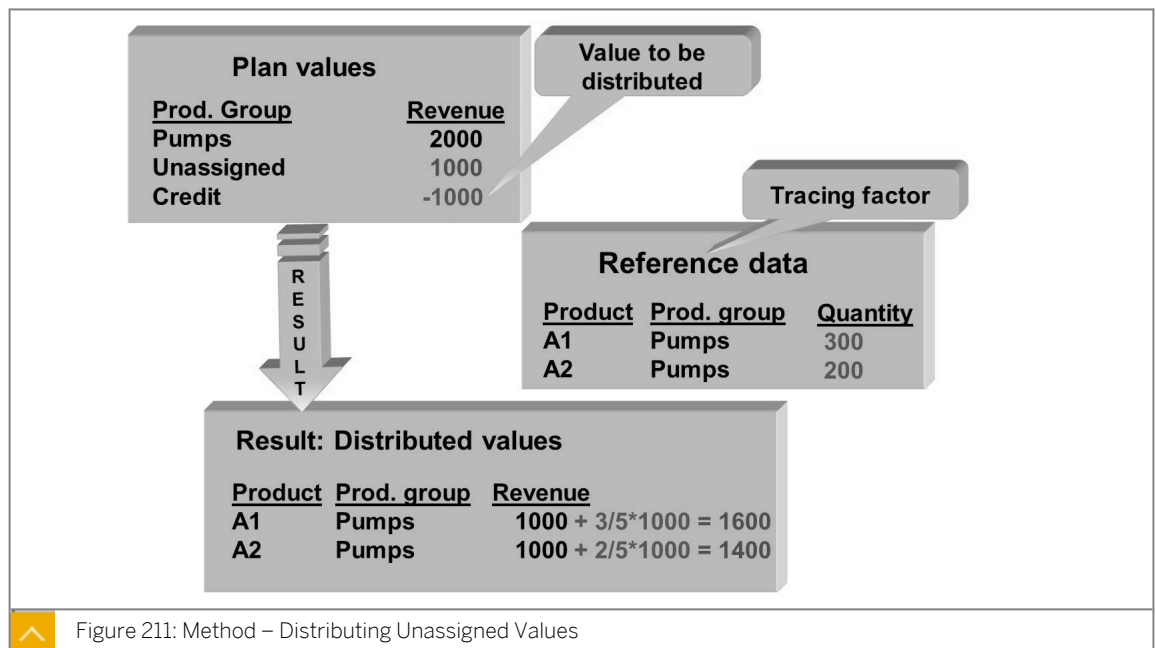
The options for specifying fields in the reference data during top-down distribution are as follows:

- Fixed value fields

The data of all value fields is distributed according to the distribution of values of this value field.
- All value fields

The data of each value field is distributed according to the relative reference data for each profitability segment for the same value field.

Distributing Unassigned Values



Top-down distribution enables you to distribute the data from a higher planning level to lower levels. For example, you can perform planning at product group level and distribute the values to product level.

The plan data is distributed in the same way as the existing reference data. With top-down distribution, you can use plan or actual data and can distribute the data separately by period or aggregate the values over several periods to level out fluctuations.

In the figure, the non-assigned plan data (value 1000) at product group level is distributed to the individual products in the same way as the base values (the actual quantities sold). This distribution is at a ratio of 3:2.

The product group is credited with 1000, and the products are debited with 600 (product A1) and 400 (product A2). We assume the initial plan for each pump was 1000 apiece.

Distributing Total Values

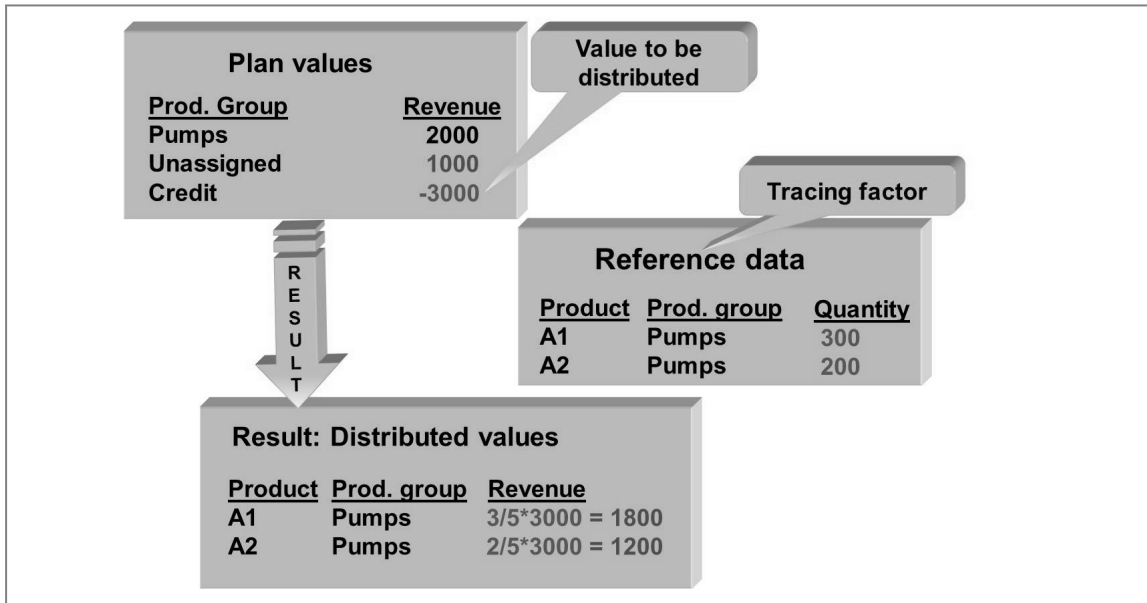


Figure 212: Method – Distributing Total Values

In the figure, the sum of the plan data for the product group is the individual values of the products (A1: 1000 and A2: 1000) and the non-assigned values (1000) at product group level. The sum is distributed to the individual products in the same way as the base values (actual quantities sold A1: 300 and A2: 200), which is at a ratio of 3:2. The product group is credited (3000) and the products are debited (A1: 1800 and A2: 1200).

Automatic Planning – Top-Down Distribution (1)



The screenshot shows the SAP Planning Framework configuration for 'Top-Down Distribution'. Key settings include:

- Define parameters for top-down distribution:** Selecting the parameter set 'IDES125' and the method 'Top-down distribution'.
- Define top-down logic:** Setting 'Distribution Method' to 'Only Distribute "Nonassigned"' and 'Receiver Characteristic' to 'ARTNR Product'.
- Define senders and receiver:** Configuring 'Reference Data' with 'Reference value fld' set to 'WIGT Invoiced quantity' and 'Cumulate Periods' checked.
- Select reference data:** Choosing 'From Period' (001..2005) and 'Actual Data' as the source.

Figure 213: Automatic Planning – Top-Down Distribution (1)

In the parameter set, you can choose between the following top-down methods that define what values are to be distributed:

- Using the Only Distribute "Nonassigned" method, you can only distribute values that are posted directly at the higher level.
- Using the *Distribute Total Value* method, you can distribute all the values located at the higher level, regardless of whether they were posted there directly or rolled up from more extensive levels. When you use this method, the values taken from the extensive level are overwritten by the new distributed value.

You specify the receiver characteristic for the distribution under *Receiver Characteristic*. You can select several characteristics from the characteristics specified in the planning level.

In the Reference value field, you can enter, as the basis for distribution, a specific value field for the reference data or a key figure calculated from value fields. Alternatively, you can specify that the distribution occurs according to value fields. In this way, each value field is taken as the basis for its distribution.

To smooth out incidental differences that occurred from period to period in the reference data, you can select the Cumulative Periods checkbox.

You specify the time frame for the reference data used as the basis for executing the planning method.

Automatic Planning – Top-Down Distribution (2)

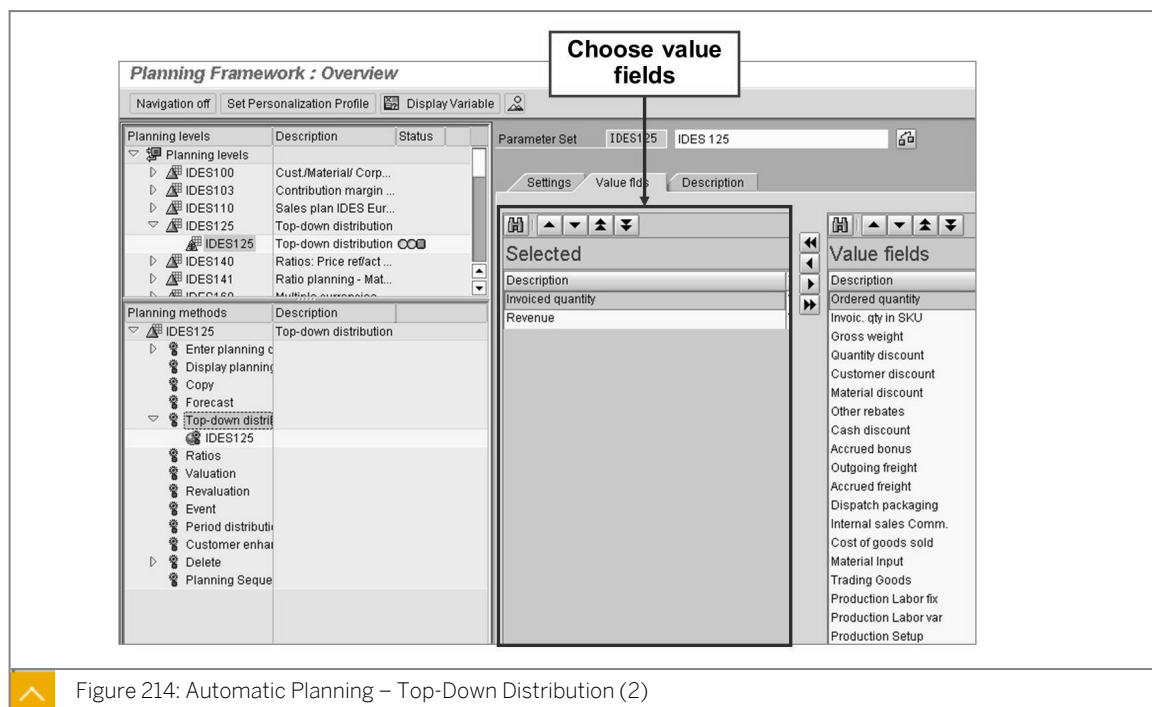


Figure 214: Automatic Planning – Top-Down Distribution (2)

In addition, you can make the following settings in the parameter set:

- Specify whether the data to be used as the reference data is the actual data, the data from the plan version for the planning package, or data from a different plan version that is yet to be specified.
- Specify for a sender characteristic that a different characteristic value in the reference data forms the basis for distribution. That is, the distribution of the product groups for the

product of country 1 is executed based on the product data of country 2. To do this, use the *Transform characteristic values* function.

- Specify whether the planning method is to be executed in a test run or in an update run, or whether this decision is to be postponed until the execution of the parameter set.
- Specify whether to jump to a background processing screen.
- Specify the value fields that are to be distributed on the *Value fields* tab page.



How to Perform a Top-Down Distribution



Demonstrate the steps listed in the Perform a Top-Down Distribution exercise.

Bottom-Up Planning



Bottom-up planning signifies manual planning using lower-level characteristics, which in turn rolls up to higher-level characteristics. The most granularity you can get is at the customer and product levels. Explain that most sales companies perform a combination of bottom-up and top-down planning. For example, certain key customers are planned at the product or customer level for the highest selling product. Miscellaneous customers are planned at the customer group level. You already demonstrated bottom-up planning in the earlier class example, so focus on the Excel integration option at this point.

Bottom-up Planning Example

Data Entry with Excel Integration



Hint:

Interactive Excel may not have been set up for your Personal Computer. You should test this demo. If it does not work, try to install Interactive Excel from the *Programs* → *SAP Frontend* → *Set-up Interactive Excel* menu.

In addition, you may get an error message when saving the data from Excel into SAP R/3 Enterprise. Just continue and the system will post anyway.

The automatic planning functions enable the automatic processing of a large number of profitability segments for planning purposes. The functions support copying, forecasting, top-down distribution, changing, and deleting plan data.

The copy function can be used to process a large number of profitability segments automatically. With this function, you can copy the existing reference data to the plan data and process several profitability segments simultaneously. Additional planning functions for changing the plan, such as period distribution or revaluation, can be executed at the same time as the copy function. You can plan for any period, even for years at a time.

With the forecast function, you can forecast the planned values for several profitability segments at a time using a specified forecast profile. The plan data that is forecast is generated on the basis of existing reference data.

The change function allows you to change the existing plan data automatically. The delete function can be used to recreate a plan at a certain point in time.

**Note:**

Demonstrate some of the automatic planning functions for cost-based CO-PA. Exactly the same functions are available for the account-based approach, provided you understand that no valuation, revaluation, top-down distribution, or planning with ratios is possible in the account-based approach.

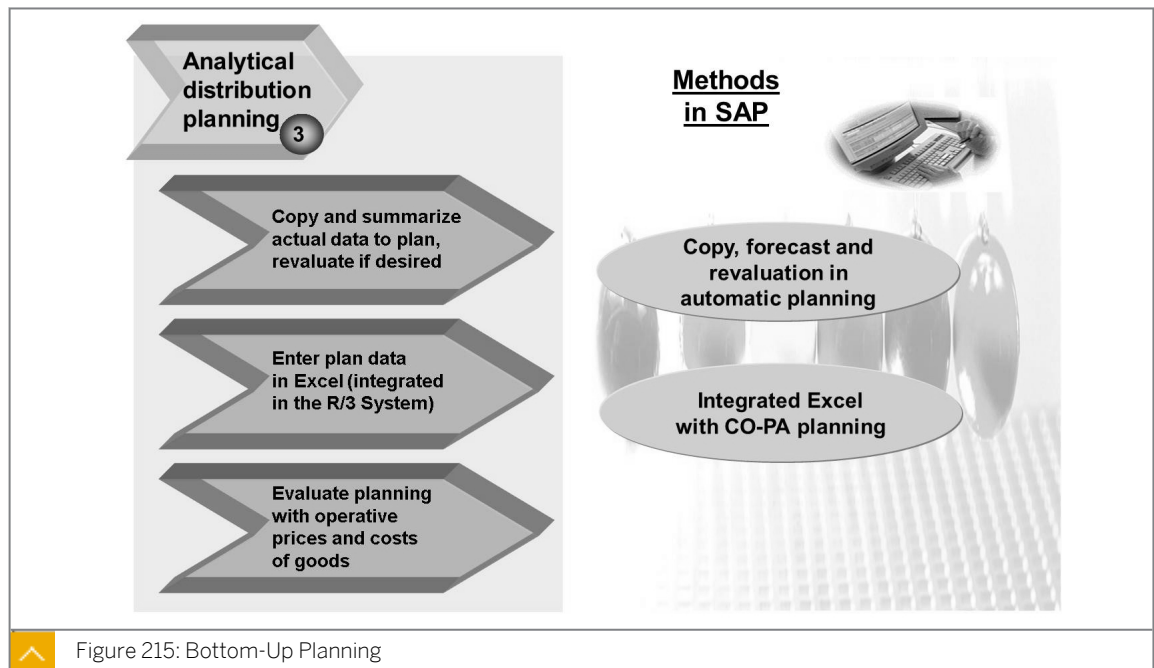


Figure 215: Bottom-Up Planning

In the third planning phase, plan values are planned bottom up, and merging of plan values can occur in several steps. For example, the default plan values can be created automatically (copied or revaluated) and then used as a plan basis for individual sales representatives.

Integrated Microsoft Excel allows sales representatives to create their sales plan data locally.

Finally, the individual plans can be merged into a single version and valued with the operative prices and costs of goods manufactured.

Example – Bottom-Up Planning

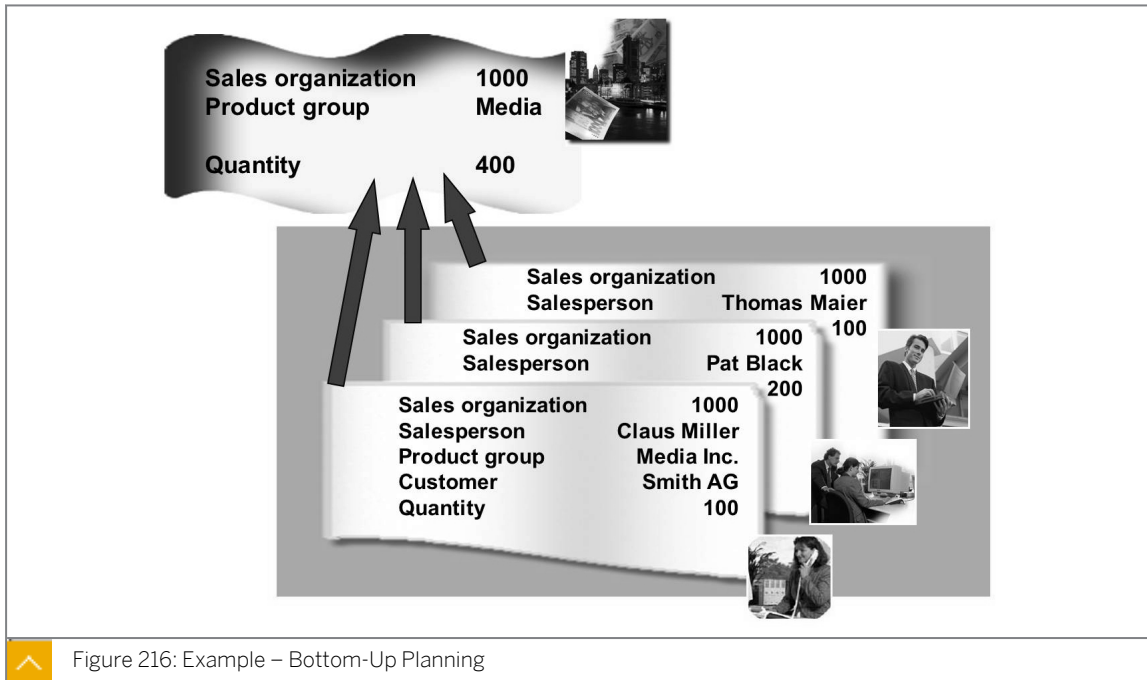


Figure 216: Example – Bottom-Up Planning

In bottom-up planning, plan data is created at customer and product group level and aggregated to corresponding higher levels.

Excel Integration

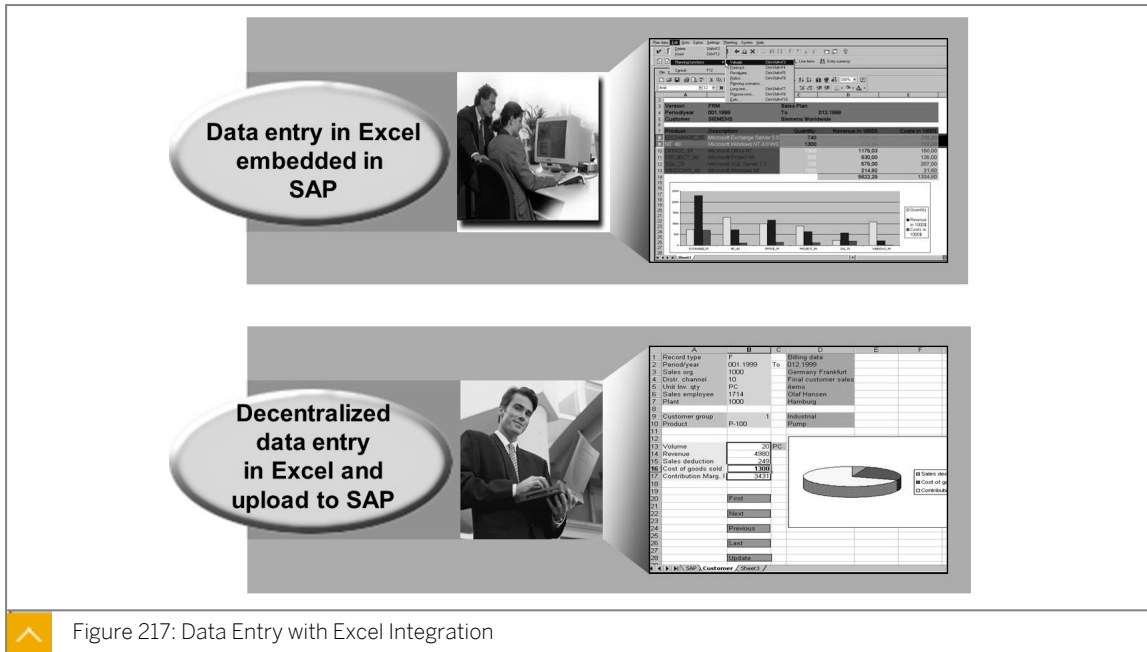


Figure 217: Data Entry with Excel Integration

The integration of Microsoft Excel into profit planning allows you to use Excel functions such as functions for additional calculations, graphics, and printing. The SAP system ensures the consistency of the data centrally, providing central functions, such as derivation and valuation.

To perform local planning, save the Excel sheets created in the SAP system locally on a PC, and then work on them in Excel outside the SAP environment. The data can be reloaded into the SAP system later using the upload functions.



How to Plan with Excel

1. Edit the plan data.
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Planning* → *Edit Planning Data*.
Select *Planning Level & Package IDES100* and enter plan data using parameter set *IDES100E*.



Hint:

Interactive Excel may not have been set up for your PC. You should test this demo. If it does not work, try to install Interactive Excel from the *Programs* → *SAP Frontend* → *Set-up Interactive Excel* menu.

In addition, you may get an error message when saving data from Excel into the SAP system. Continue and the system will post the data.

- b) Create a planning package with the same information as planning package, **AC60500**, but using *Customer* instead of *Customer/Product*.
Activate Excel in your plan parameters.
- c) Choose *Settings* → *Formatting* to allow formatting of the Excel layout. Choose *Generic File* and enter **SALES* .TXT** as a file name. Continue the Excel planning demo.
- d) Choose *save file description* and then *save Excel layout*.
- e) Save (using Excel functions) this spreadsheet to your N drive as an XLS file (Name this file **SALES01 .XLS**).
- f) Go out to your N drive and call file SALES01.XLS. Enter the following data:
Product P-100; revenue - 50000; quantity - 5000.
Product P-103; revenue - 40000; quantity - 4000.
- g) Save this file as a .TXT file (**SALES01 .TXT**). Close this file.



Note:

Use file type *tab delimited*, and prompt through all of the save requests.

- h) On the *SAP Easy Access* screen, choose *Application* → *Controlling* → *Profitability Analysis* → *Planning* → *Integrated Planning* → *Upload to Excel* → *Execute and enter the following data*

Field Name or Data Type	Value
<i>Operating concern</i>	IDEA
<i>Planning layout</i>	The layout you created

Field Name or Data Type	Value
<i>Import single file</i>	Activate
<i>Path file</i>	N drive destination
<i>Type of Prof Analysis</i>	1

- i) Choose the *Execute* pushbutton.
- j) You will receive an *ok* response.
Return to the planning screen to view the data uploaded to the SAP system.

Evaluate Additional Planning Functions

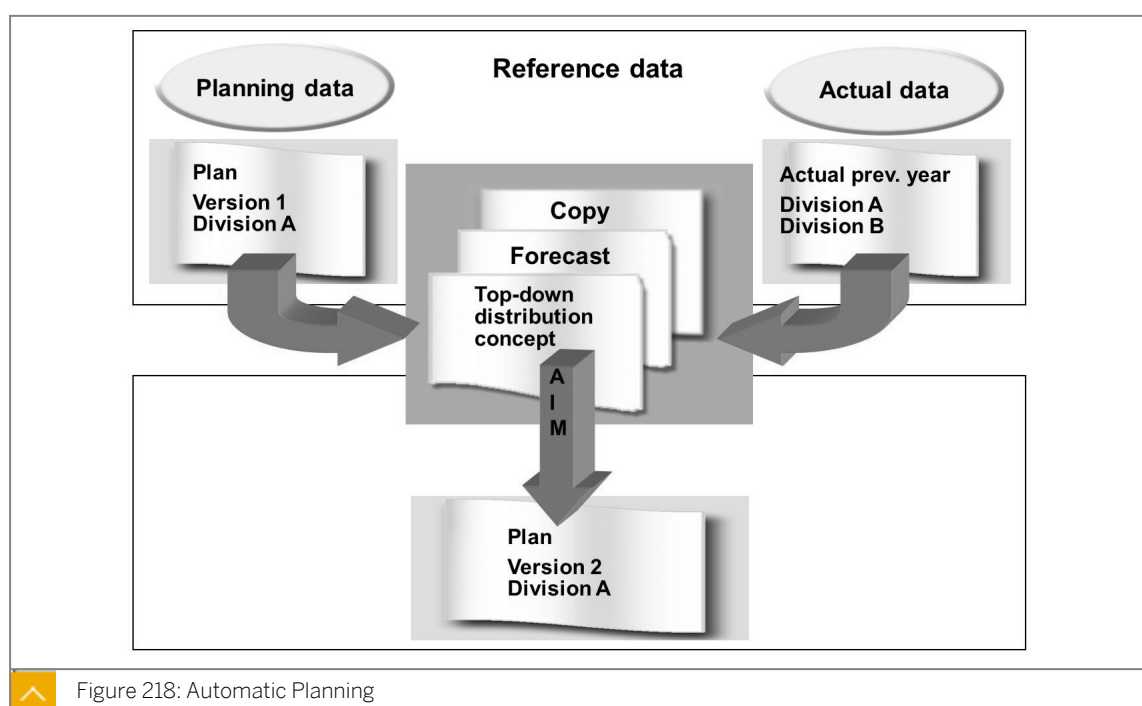


Figure 218: Automatic Planning

Automatic planning functions can be used to process a large number of profitability segments simultaneously. These functions can be executed online or in the background, and require authorization for use.

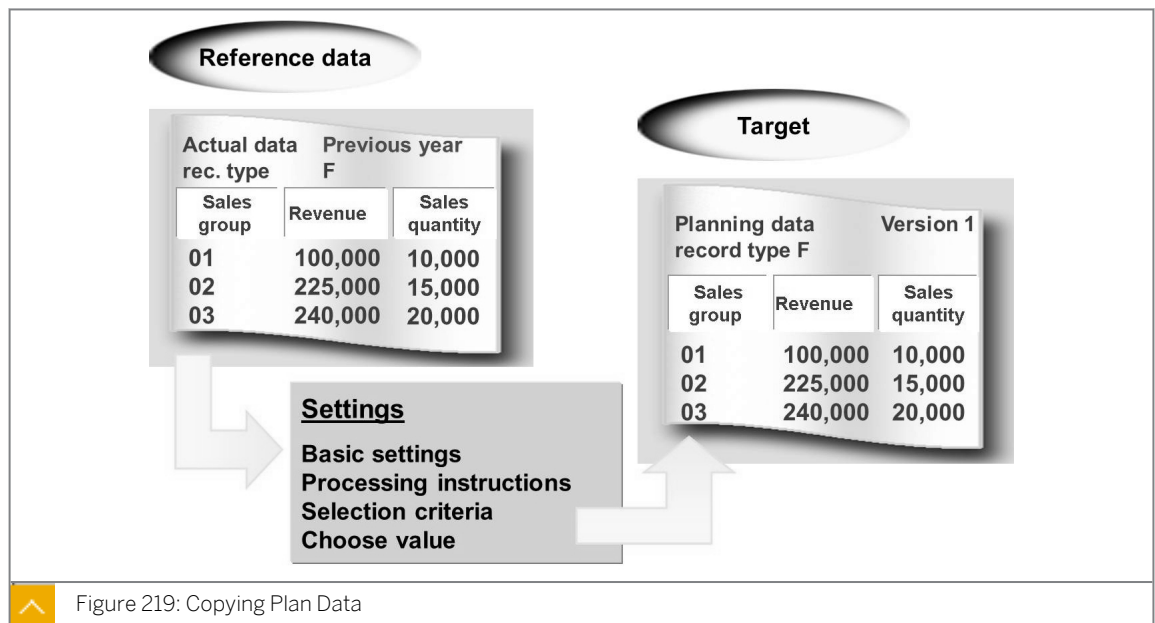
When using automatic planning, specifying the characteristics and value fields that you want to process allows you to set the planning scope in each case.

Automatic planning functions are included in the concept of planning levels and planning packages.

There are 12 planning methods from where you can select the characteristics to be planned at the planning level and in the planning package. Enter all other settings and select the value fields in a parameter set for the corresponding planning method, such as Copy.

The Planning Management function keeps track of the automatic planning functions that were executed and the user who executed these functions. This function also provides a complete log of mass changes made to plan data, the log information as to when certain functions were carried out, who carried them out, and what profitability segments were changed.

Copying Plan Data



In the target fields, specify the following information:

- The posting periods to be updated with the copied data
- The plan version to be updated
- The record type under which the plan data is to be saved

In the source fields, specify the following information:

- The posting periods from which data is to be copied
- The plan version from which the data is to be copied (if copying plan data)
- The record type of the plan data you want to copy
- The plan/actual indicator

Specify a distribution key to summarize the source data for all the periods and then distribute them across the target periods. If you leave the distribution key field blank, the values are copied directly from the source periods to target periods.

Select the Valuate radio button, for the system to automatically perform valuation during the copy process. Target value fields may then be populated with values from costing sheets, product costing, and user-exits.

Specify whether the source data should overwrite, add to, or subtract from the existing data in the target plan version.

Copying Plan Data – Transformation of Characteristics



Reference data		Transformation	Operating profit				
			Do not add + do not post	Add + post	Do not add + post	Add + do not post	
Cust. 1	1,000	Cust. 1 -> Cust. 2	Cust. 1	1,000	0	0	1,000
Cust. 2	2,000		Cust. 2	1,000	3,000	1,000	3,000

Figure 220: Copying Plan Data – Transformation of Characteristics

Add and Post options have been added to characteristic transformation.

When using the Add function, the copied values are added to the existing recipient characteristics.

When Add is not selected, the copied values overwrite the existing plan data in the recipient characteristic.

When you select the Clear indicator, the values in the original characteristic are removed.

Forecasting



Forecast profile: Moving average

Forecast strategy: Moving average

Previous periods: 5

Periods/season:

Source data
Actual revenue

Period	Posted values
12/08	100
11/08	90
10/08	110
09/08	150
08/08	100

Forecast data
Plan revenue

Forecast results

Period	Forecast results
01/09	110

Figure 221: Forecasting

You can use the forecasting function to automatically calculate new plan data using existing data and customizable forecast profiles. You can use forecasting in manual and in automatic planning.

A forecast profile has the following characteristics:

- A forecast profile is a combination of a forecast model delivered by SAP and a set of user-defined parameters.
- You can create forecast profiles in the CO-PA user menu. The SAP system supports a number of predefined forecast models, including trend models, seasonal models, and exponential models.
- Weighting groups may be required as a parameter for the forecast profile, depending on the model you have selected. Weighting groups are also created in the CO-PA application menu.
- With manual planning, you make a forecast by selecting a value or a column, and then choosing the *Forecast* function. In the dialog box, enter the required parameters, such as the forecast period and the reference data to be used.
- To forecast with automatic planning, choose *Automatic Planning* → *Forecast* in the application menu, and enter a forecast profile and the required parameters on the initial screen.

Planning Sequences



The screenshot shows the 'Planning Framework : Overview' interface. It features a navigation pane on the left with 'Planning levels' and 'Planning methods' sections. The 'Planning levels' section includes items like IDES100, IDES103, IDES110, IDES125, IDES140, and IDES141. The 'Planning methods' section includes 'Enter planning c', 'Display planning', 'Copy', 'Forecast', 'Top-down distrib', 'Ratios', 'Valuation', 'Revaluation', 'Event', 'Period distributi', 'Customer enhai', 'Delete', and 'Planning Sequ'. The 'Planning Sequence' table is visible on the right, with the following data:

Seq.	Met.	Name	Paramet.	Name
1	ATPD	Top-down distribution	IDES125	IDES125
2	ADEL	Delete	IDES125	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Figure 222: Planning Sequences

You can use planning sequences to combine, sort, and execute several automatic planning methods in one run. For example, first copy the plan values, distribute them using the top-down method, and then reevaluate them.



This section introduces the options provided by the functions of integrated planning in CO-PA. Point out that, in integrated planning, the data transfer to Logistics Information System (LIS), evaluations with manufacturing or conditions from the sales order management are only possible in the costing-based CO-PA. However, data can be transferred from the costing-based and account-based CO-PA into the EC-PCA. Only the cost center cost assessment for plan values is supported for both approaches.



Note:

Cost center and process assessment in the planning area is not explained in detail. Explain that the assessment for the plan data functions in exactly the same way as the assessment of the actual data.

Integrated Transfers of Plan Data

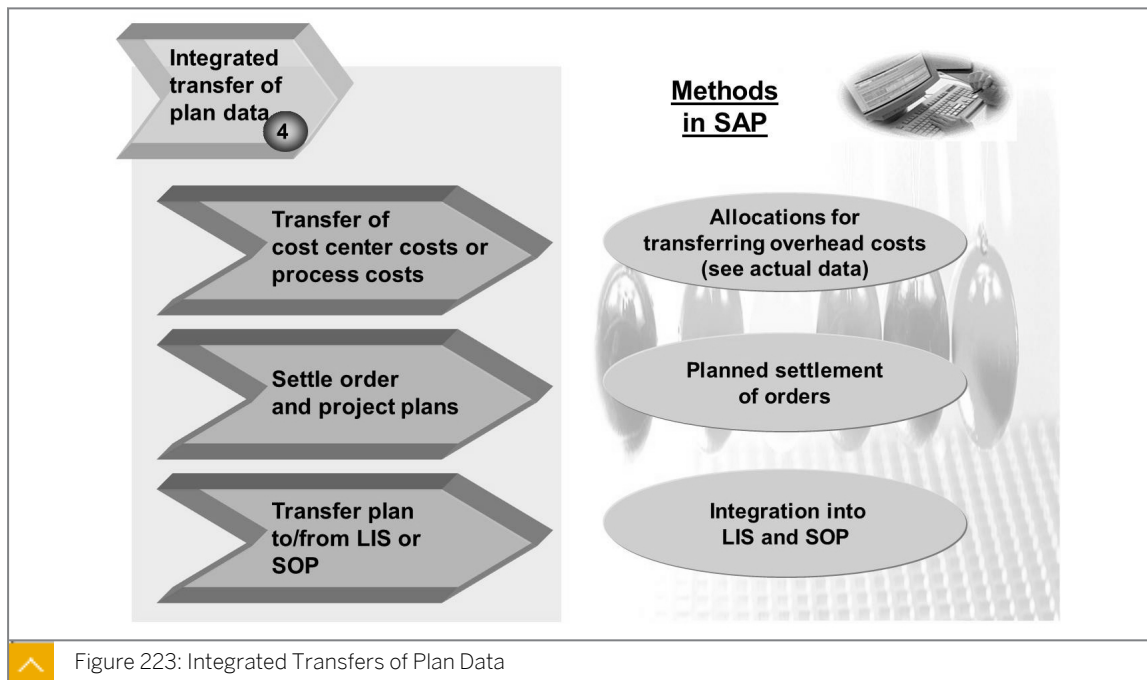


Figure 223: Integrated Transfers of Plan Data

In the fifth planning phase, you complete your sales and profit planning data with the additional plan data from other application components.

Integration of Planning

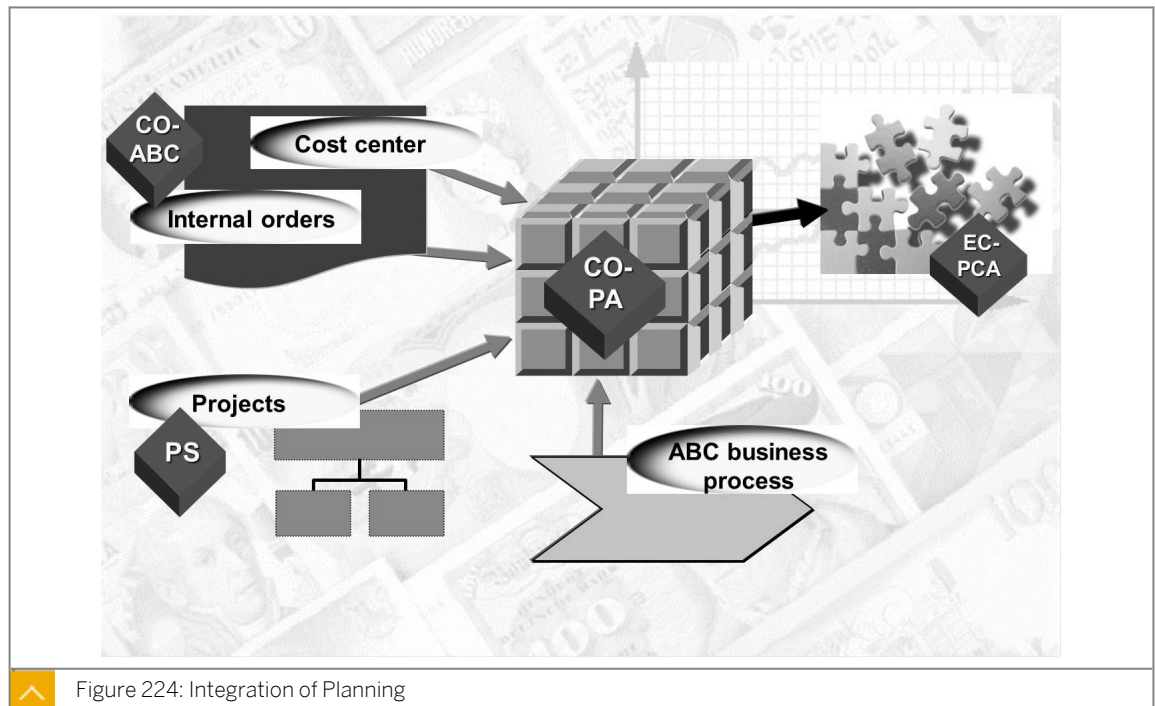


Figure 224: Integration of Planning

The SAP system supports integrated planning in Controlling (CO). Although planning is conducted separately for multiple business activities in CO, the plans are linked to ensure consistency and drive realistic corporate-wide planning. As a result, the planning results for sales, service, production, procurement, general, and administration activities coincide to form one corporate operational plan.

The integration of multiple plans is accomplished in the SAP system through real-time and periodic synchronization of the data in the plan versions across modules. For example, the sales quantities planned in Sales Information System (SIS) may be transferred in batch to Sales and Operation Planning (SOP), which then uses the information to generate the necessary planned production and procurement activities. This example can be integrated with the overhead plans in CO-CCA, and the end results can be passed to CO-PA, where the resulting overall profitability plan resides.

The flow of planning data is one of the many possible planning strategies that can be used in the SAP system. The flow used for a given company depends on many factors, such as the modules being implemented, the planning functions in those modules, the integration functions between the modules, and the necessary maintenance steps to achieve integration.

CO Plan Integration

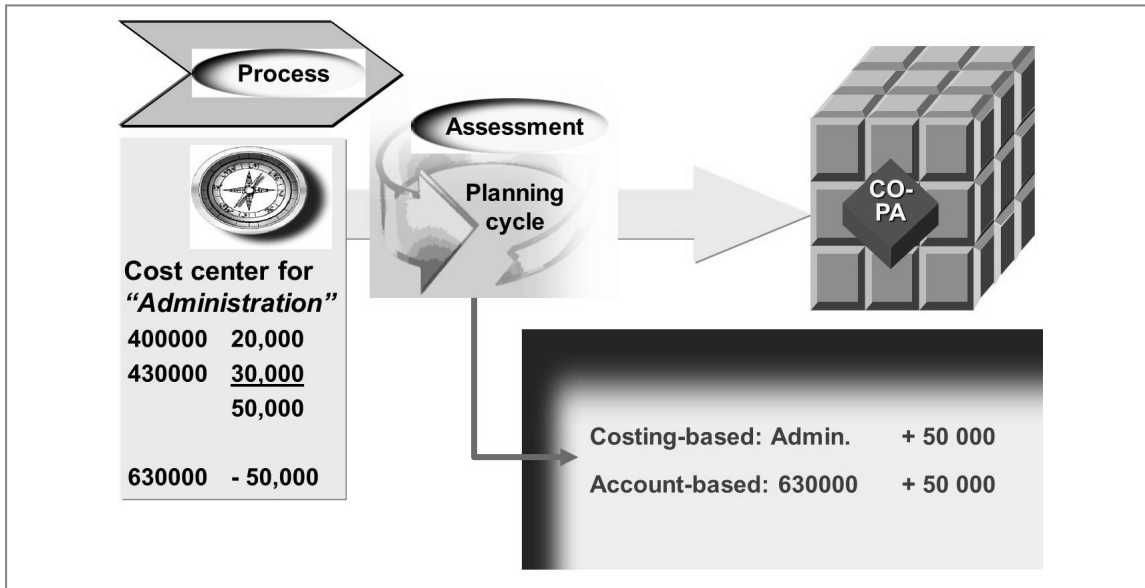


Figure 225: CO Plan Integration

To reflect plan costs from CO-CCA in PA, transfer those costs into the CO-PA portion of a plan version through a cost center assessment. With this tool, planned costs can be allocated across profitability segments in the same way that actual costs can be allocated across profitability segments.

To assess cost center costs in CO-PA, an assessment cycle is first defined as follows:

- The assessment cycle consists of a series of segments, each of which defines a unique relationship between senders, receivers, and assessment rules. These segments can be defined on the user side of CO-PA.
- When assessment cycles are defined, you need to specify the controlling area from which the assessment takes place. This is because the allocations in Management Accounting can only take place within a single controlling area through the restrictions of SAP cost accounting rules.
- When allocating in CO-PA, it is not possible to exceed controlling areas. The controlling area is one part of the definition of the receiver's operating concern.
- Specify the side of CO-PA from which the tracing factors should be drawn for an assessment rule for which variable portions are defined. This setting controls whether values are distributed based on account balances for profitability segments or key figure amounts for profitability segments.

Assessments affect both costing-based CO-PA and account-based CO-PA, if both are active. This is necessary from an SAP costing perspective because costs are being moved from the originating account assignment objects and cost centers, and placed on the receiving objects and profitability segments, which are shared between both sides of CO-PA.



How to Use the Integration Functionality

Demonstrate integrated planning.

1. On the SAP Easy Access screen, choose *Accounting → Controlling → Profitability Analysis → Planning → Edit Planning Data*.

Use the IDES125 planning layout to plan the following data:

Field Name or Data Type	Value
<i>Version</i>	100
<i>Period/year</i>	01 to 12 in the current fiscal year
<i>Product</i>	P-100
<i>Plan quantity</i>	
<i>Revenue</i>	

Save the plan data.

2. Next, transfer the plan data to SOP.

On the SAP Easy Access screen, choose *Accounting → Controlling → Profitability Analysis → Planning → Integrated Planning → Transfer Quantities to SOP*.

Plan data:

Field Name or Data Type	Value
<i>Plan data</i>	Blank
<i>Periods</i>	01 to 12, current fiscal year
<i>Version</i>	100
<i>Record type</i>	F
<i>Characteristic</i>	Product
<i>Quantity</i>	VVIQT (invoiced quantity in sales units)

SOP:

Version: A00



Do not use a test run.

Selection criteria:

Field Name or Data Type	Value
<i>Product</i>	P-100
<i>Other characteristics</i>	Blank

Execute the transfer.

3. Display the management function and mention that it is available for all automatic activities.

On the SAP Easy Access screen, choose *Accounting → Controlling → Profitability Analysis → Planning → Integrated Planning → Management*.

4. Display the result in SOP.

Material: P-100

Choose active version.

On the *SAP Easy Access* screen, choose *Logistics* → *Production* → *Sales & Operations Planning* → *Planning* → *For Material* → *Change*.



Create Manual Planning Functions



Business Example

The management of your company wants to implement a profitability accounting application in your SAP system. As a member of the project team, you must recommend whether to implement CO-PA or EC-PCA. Then, you will be responsible for implementing the selected applications. The managers have the following requirements:



- Sam Sales and Randy Revenue want to use the CO-PA module to plan the sales of the two main product lines of the company, bicycles and motorcycles. Sam wants to plan his sales by customer and product. He wants to plan the sales quantities and selling prices for each customer and product combination, and he expects the system to calculate the planned revenue from the results. Randy wants to plan his sales by product group and then he wants to use the system to automatically distribute the planned values to the product level using a reasonable allocation basis.
- Mr. Miller is only interested in the plan quantity and the plan revenues. The product managers would like to perform what-if analyses on the plan data for various scenarios in order to analyze possible effects of strategic decisions on sales. For example, they might want to analyze the effect that pricing increases might have on revenue.
- Peter Plant wants to use the projected sales quantities from CO-PA to plan his production and material procurement schedules. He wants to have access to the CO-PA plan values in SOP. For this reason, planning quantities, prices, and revenue at customer and product level are required.

Planning at the product group level is required with the systematic distribution of values to the product level. Mass changes to plan values are required to analyze different business scenarios. Transferring CO-PA plan data to SOP is required to aid production scheduling. For this purpose, you need to know the profit planning process and the phases in sales planning.

Create manual planning functions

Task 1

1. Create a new plan version for CO-PA. Name the version **5##** and enter a unique description for your group. Set up the version for the operating concern *IDEA*, so that values can be stored in CO-PA. Set the derivation date as the beginning of the current fiscal year.

Task 2

Your sales managers have asked you to create the following Planning screen so that each sales employee can enter the top products and customers using the version **5##**, the current fiscal year and the sales organization **1000**.



Customer	Product	Invoiced quantity	Revenue

- Review planning level AC605. Which characteristics have been selected?
- Create a new planning package under the planning level **AC605** in costing-based CO-PA that can be used for planning the information requested by your sales managers.
Name the package **Plan##** and enter an appropriate description.
The planning package is to be used for the period **1 - 12.XXXX**, for your version **5##**, record type **F**, in the sales organization **1000**.
Save your planning package. The planning package should appear under the planning level, AC605, on the left of the screen.
- Create a parameter set for the plan method *Entering and Displaying Planning Data* for your planning package.
Choose the *Enter planning data* planning method and right-click. Choose *Create Parameter Set*. Name the parameter set **Plan##**.
Select *Create Layout* to create the data entry screen and create your planning layout dynamically.
Name the layout **Plan##**. Indicate the appropriate level for the displayed characteristics. The *Customer* and *Product* should appear in the lead column and all the other characteristics should be displayed in the header.
Next, define the appropriate value fields from the list of value fields, based on the above requirement.
Change the distribution key for the currency and the quantities to *Equal distribution (1)* and save your parameter set.
- Create another parameter set for the *Display planning* method.

Task 3

- Plan values for the customer T-CO05A##.

Enter the following planning data:

Customer	Product	Invoiced Quantity	Revenue
T-CO05A##	P-100	100	100,000
T-CO05A##	P-101	50	75,000
T-CO05A##	P-102	120	130,000

- Increase all the planned quantity and revenue values by 5%. What are the two options that you could use to do this?
Do not save the re-evaluated data.



Hint:

To use the *Change values* option, you must enter a fixed value or percentage. To use the *Revaluate* feature, you must select one or more lines (and *revaluation factors* must have been predefined).

- Find the additional characteristic values for any of the profitability segments being planned that are not displayed on the layout screen (for example, the ones determined behind the scenes by means of derivation). What planning principle does this show?
Exit the planning screen without saving.

Task 4

Your sales managers are pleased with the planning screen that you have designed for them but they would like to add a field for *Price*. They want to be able to plan invoice quantity and the product price and then have the system calculate revenue. Because they also know that their revenue goals are often changed, they would like to be able to change the revenue figure without impacting the price. This would establish how many units of a product need to be sold.

They have asked you to add a unit of measure because products are often stored in various units.

- To add the ratio for the *Price* column, change your layout accordingly. You can access the layout by changing the *Plan##* parameter set. Insert a new column and select *Price/unit – product*.
You also want to adjust the settings for the quantity column to display 0 decimal places. Make sure you save your settings after the changes are made.
Click the *Plan##* planning package one time to select it. In the planning methods, select the arrow next to *Enter Planning*. Then highlight the parameter set *Plan##*. Right-click to change the parameter set.
- Test your changed planning layout by entering another product, **P-103**, for your customer. Enter the price (1500). You can see how the price is calculated.
Next, change the planned price for the product **P-100** to **1,500** and choose *Enter*. Is the corresponding revenue or the quantity recalculated? Why?
Next, change the revenue value for **P-101** to **50,000** and choose *Enter*. Is the corresponding price or the quantity recalculated? Why?



Create Manual Planning Functions



Business Example

The management of your company wants to implement a profitability accounting application in your SAP system. As a member of the project team, you must recommend whether to implement CO-PA or EC-PCA. Then, you will be responsible for implementing the selected applications. The managers have the following requirements:



- Sam Sales and Randy Revenue want to use the CO-PA module to plan the sales of the two main product lines of the company, bicycles and motorcycles. Sam wants to plan his sales by customer and product. He wants to plan the sales quantities and selling prices for each customer and product combination, and he expects the system to calculate the planned revenue from the results. Randy wants to plan his sales by product group and then he wants to use the system to automatically distribute the planned values to the product level using a reasonable allocation basis.
- Mr. Miller is only interested in the plan quantity and the plan revenues. The product managers would like to perform what-if analyses on the plan data for various scenarios in order to analyze possible effects of strategic decisions on sales. For example, they might want to analyze the effect that pricing increases might have on revenue.
- Peter Plant wants to use the projected sales quantities from CO-PA to plan his production and material procurement schedules. He wants to have access to the CO-PA plan values in SOP. For this reason, planning quantities, prices, and revenue at customer and product level are required.

Planning at the product group level is required with the systematic distribution of values to the product level. Mass changes to plan values are required to analyze different business scenarios. Transferring CO-PA plan data to SOP is required to aid production scheduling. For this purpose, you need to know the profit planning process and the phases in sales planning.

Create manual planning functions

Task 1

1. Create a new plan version for CO-PA. Name the version **5##** and enter a unique description for your group. Set up the version for the operating concern *IDEA*, so that values can be stored in CO-PA. Set the derivation date as the beginning of the current fiscal year.
 - a) In Customizing, choose *Controlling* → *Profitability Analysis* → *Planning* → *Initial Steps* → *Maintain Versions*.
 - b) On the *General Version Definition* screen, choose the *New Entries* pushbutton.
 - c) On the *General Version Overview* pane, enter the following data:


Field Name or Data Type	Value
Version	5##
Name	Plan 5##

Select the *Plan* checkbox and choose *Enter*.

- d) Select the *Plan 5##* row and choose *Settings in Operating Concern* in the *Dialog Structure* column.
- e) In the *Set Operating Concern* dialog box, enter **IDEA** in the Operating concern field and choose *Continue*.
- f) In the *Confirm transfer from version* dialog box, choose *Yes* to confirm.
- g) On the *Change View "Settings in Operating Concern": Details* screen, enter **B0** in the *Currency type* field and save the entry.



Note:

If you are prompted for a transport request choose  (Create), give it a description, choose *Save* and then choose *Enter*.

- h) Return to the *SAP Easy Access* screen.

Task 2

Your sales managers have asked you to create the following Planning screen so that each sales employee can enter the top products and customers using the version **5##**, the current fiscal year and the sales organization **1000**.



Customer	Product	Invoiced quantity	Revenue

1. Review planning level **AC605**. Which characteristics have been selected?
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Planning* → *Edit Planning Data*.
 - b) On the *Planning Framework: Overview* screen, double-click the **AC605** node in the *Planning levels* column.
 - c) On the *Charact.* tab page, you can see the following fields:
Customer, Product, Period/year, Record Type, Sales Org., and Version.
2. Create a new planning package under the planning level **AC605** in costing-based CO-PA that can be used for planning the information requested by your sales managers. Name the package **Plan##** and enter an appropriate description. The planning package is to be used for the period **1 - 12.XXXX**, for your version **5##**, record type **F**, in the sales organization **1000**.

Save your planning package. The planning package should appear under the planning level, AC605, on the left of the screen.

- a) On the *Planning Framework: Overview* screen, right-click the AC605 node and choose *Create Planning Package*.
- b) In the *Create Planning Package* dialog box, enter **Plan##** in the *Plan. package* field and add a description as **Plan Package ##**. Choose *Continue*.
- c) On the *Selection* tab page, enter the following data:

Field Name or Data Type	Value
<i>Version</i>	5##
<i>Record Type</i>	F

Save the entries.

- 3. Create a parameter set for the plan method *Entering and Displaying Planning Data* for your planning package.


Choose the *Enter planning data* planning method and right-click. Choose *Create Parameter Set*. Name the parameter set **Plan##**.

Select *Create Layout* to create the data entry screen and create your planning layout dynamically.

Name the layout **Plan##**. Indicate the appropriate level for the displayed characteristics. The *Customer* and *Product* should appear in the lead column and all the other characteristics should be displayed in the header.

Next, define the appropriate value fields from the list of value fields, based on the above requirement.

Change the distribution key for the currency and the quantities to *Equal distribution (1)* and save your parameter set.

- a) Choose the AC605 node in the *Planning methods* column. Right-click *Enter planning data* and choose *Create Parameter Set*.
- b) In the *Parameter Set: Create* dialog box, enter **Plan##** in the *Parameter Set* field and add a description **Plan##**. Choose *Continue*.
- c) On the *Settings* tab page, choose  (*Create*). In the *Create Planning Layout* dialog box, enter **Plan##** in the *Layout* field and add a description as **Plan##**.
- d) On the *Charact.* tab page, choose *Lead column* for the *Customer* and *Product* fields.
- e) On the *Value flds* tab page, choose *Invoiced quantity* and *Revenue*. Save the fields.
- f) Under the *Distribution Key for Periodic Distribution* pane, enter **1** in the *Distribution Key Currency* field.
- g) Save the parameter set.

- 4. Create another parameter set for the *Display planning* method.

- a) In the *Planning Methods* column, right-click the *Display planning* method and then choose *Create Parameter Set*.

- b) In the *Parameter Set: Create* dialog box, enter **Plan##** in the *Parameter set* field and add a description **Plan##**.
- c) On the *Settings* tab page, under the *Planning Layout* pane, enter **Plan##** in the *Layout* field.
- d) Save your parameter set.



Note:

We are creating two parameter sets that use the same layout. One will allow the entry of data, while the other is for display.

Task 3

1. Plan values for the customer T-CO05A##.

Enter the following planning data:

Customer	Product	Invoiced Quantity	Revenue
T-CO05A##	P-100	100	100,000
T-CO05A##	P-101	50	75,000
T-CO05A##	P-102	120	130,000

- a) In the *Planning methods* column, choose AC605 → *Enter planning data* → PLAN##.
- b) On the *Change Sales and Profit Plan: Aggregated values* screen, enter the following data:

Row 1

Field Name or Data Type	Value
<i>Customer</i>	T-CO05A##
<i>Product</i>	P-100
<i>Revenue</i>	100000
<i>Invoiced quantity</i>	100

Row 2

Field Name or Data Type	Value
<i>Customer</i>	T-CO05A##
<i>Product</i>	P-101
<i>Revenue</i>	75000
<i>Invoiced quantity</i>	50

Row 3

Field Name or Data Type	Value
<i>Customer</i>	T-CO05A##
<i>Product</i>	P-102
<i>Revenue</i>	130000
<i>Invoiced quantity</i>	120

Save the entries.



2. Increase all the planned quantity and revenue values by 5%. What are the two options that you could use to do this?

Do not save the re-evaluated data.



Hint:

To use the *Change values* option, you must enter a fixed value or percentage. To use the *Revaluate* feature, you must select one or more lines (and *revaluation factors* must have been predefined).

- a) In the *Planning methods* column, choose *AC605 → Enter Planning Data → Plan##*. Double-click *Plan##*.
 - b) Select a value to change.
 - c) Choose *Edit → Planning methods → Change values*.
 - d) In the *Change Values* dialog box, enter **5** in the *Revaluation factor* field and choose the *Revaluate* pushbutton.
 - e) Check that the values are updated.
 - f) Select *Edit → Undo → Undo entries*.
 - g) Choose *Edit → Planning methods → Revaluate*.
 - h) In the *Revaluation* dialog box, enter **ID2** in the *Revaluation Key* field and choose *Continue*.
 - i) Return and exit the data entry without posting the data.
3. Find the additional characteristic values for any of the profitability segments being planned that are not displayed on the layout screen (for example, the ones determined behind the scenes by means of derivation). What planning principle does this show? Exit the planning screen without saving.
- a) Select a row and choose  (*Characteristics*).
This shows automatic bottom-up planning by the system based on the principle of conducting derivation on all the planned characteristic values.
 - b) On the *Display characteristics* dialog box, choose *Continue*.
 - c) Choose  (*Cancel*) to exit the screen without saving. Remain on the *Planning Framework: Overview* screen.

Task 4



Your sales managers are pleased with the planning screen that you have designed for them but they would like to add a field for *Price*. They want to be able to plan invoice quantity and the product price and then have the system calculate revenue. Because they also know that their revenue goals are often changed, they would like to be able to change the revenue figure without impacting the price. This would establish how many units of a product need to be sold.

They have asked you to add a unit of measure because products are often stored in various units.

1. To add the ratio for the *Price* column, change your layout accordingly. You can access the layout by changing the *Plan##* parameter set. Insert a new column and select *Price/unit – product*.

You also want to adjust the settings for the quantity column to display 0 decimal places. Make sure you save your settings after the changes are made.

Click the *Plan##* planning package one time to select it. In the planning methods, select the arrow next to *Enter Planning*. Then highlight the parameter set *Plan##*. Right-click to change the parameter set.

- a) On the *SAP Easy Access* screen, choose *Accounting → Controlling → Profitability Analysis → Planning → Edit Planning Data*.
- b) On the *Planning Framework: Overview* screen, choose the *AC605* node in the *Planning method* column. In the *Planning levels* pane, right-click *Plan##* and choose *Change Parameter Set*.
- c) On the *Settings* tab page, choose  (*Display*) of *Plan##* in the *Layout* field.
- d) On the *Report Painter: Display Planning layout for Sales and Profit Planning* screen, choose *Plan##* and choose  (*Display<->Change*).
Double-click the period between the *Invoice Quantity* and *Revenue* column.
- e) In the *Select element type* dialog box, select the *Attribute* radio button. In the *Choose attribute* dialog box, select the *Unit* radio button and choose *Continue*.
- f) In the *Element definition: Unit* dialog box, choose the *More* pushbutton. In the *Value field* dropdown list, choose *Invoiced quantity*. In the *Text maintenance* dialog box, enter **UOM** in the *Short* field. Choose the *Copy short text* pushbutton. Choose the *Confirm* pushbutton.
- g) Adjust the settings for the quantity column to display 0 decimal places. Highlight the *UOM* column then choose *Formatting → Number format*. Choose 0 in front of *Decimal places* pane and then choose *Enter*.
- h) Double click between *Invoiced Qty* and *Revenue*, select *Value Field with Characteristic*. In the *Value field* dropdown list, choose *Price/unit -product (OERL)* and choose *Continue*.
- i) In the *Text maintenance* dialog box, choose the *Confirm* pushbutton and in the *Element definition: Price/unit – product* dialog box, choose the *Confirm* pushbutton. Save the changes to your planning layout. Return to the *SAP Easy Access* screen.

2. Test your changed planning layout by entering another product, **P-103**, for your customer. Enter the price (1500). You can see how the price is calculated.

Next, change the planned price for the product **P-100** to **1,500** and choose *Enter*. Is the corresponding revenue or the quantity recalculated? Why?

Next, change the revenue value for **P-101** to **50,000** and choose *Enter*. Is the corresponding price or the quantity recalculated? Why?

- a) On the *Planning Framework: Overview* screen, choose *Plan##* in the *Planning methods* column and enter the following data:

Field Name or Data Type	Value
<i>Customer</i>	T-CO05A##
<i>Product</i>	P-103
<i>Invoiced quantity</i>	100
<i>Revenue</i>	1,500

Choose *Enter*. The *Price/unit - product* should be populated with 15.

- b) Change the *Revenue* value for the product **P-101** to **50,000** and choose *Enter*.
The quantity is recalculated because the system has been programmed with fixed rules to recalculate the numerator of the formula if this value is not blocked against changes.
- c) In Customizing, choose *Controlling* → *Profitability Analysis* → *Planning* → *Planning Aids* → *Define Ratios and Ratio Schemes*.
- d) View the row for *ERL*. You will see the *Calc. type* is set to 2, which is *Recalculate base value*.
- e) Return to the *SAP Easy Access* screen.

Unit 11

Exercise 31



Perform a Top-Down Distribution

Business Example

Your planners like to plan at a high level and then distribute the values to a lower level. You need to conduct a top-down planning run.

Plan miscellaneous sales quantities and revenues for material group **003**, in version **5##**. Then, distribute these planned values top-down based on the actual 2002 sales quantities and revenues.

1. Enter the planning figures for planning version **5##**, using the planning level *IDES125*. The planned values are for the current year.

Under planning level *IDES125*, create a new planning package, **Top##**, for your plan version.

Right-click planning level *IDES125* and select *Create Planning Package*.

Add the following data to your planning package:

Field Name or Data Type	Value
<i>Period/Year</i>	1 - 12.XXXX
<i>Unit Inv. Qty</i>	CAR
<i>Version</i>	5##

2. Enter the planning data for the planning package you just created:

At the bottom-left of the screen, double-click the node to select plan parameter *IDES125*. Plan your values for material group **003**.

Field Name or Data Type	Value
<i>Material group</i>	003
<i>Planned quantity</i>	100,000
<i>Revenue</i>	200,000,000.00

3. Display your plan postings using the report *IDES125*.

Field Name or Data Type	Value
<i>Period from</i>	001.Current Year
<i>Period to</i>	012.Current Year
<i>Plan/Act. Indicator</i>	1
<i>Version</i>	5##

Field Name or Data Type	Value
<i>Record Type</i>	F

Drill down to the individual product level and double-click *Product*. Why are there values in the unassigned category?

4. Using the same report, display the actual postings for January through December 2002. Use the actual indicator and record type **F**. Drill down to the product level for the material group 003.
If you want to perform a top-down distribution for the planned quantity and the planned revenue in version 5## and use the actual quantity as a distribution factor, what would the weighting factors be?
5. Carry out the top-down distribution.
Return to the planning framework and select your planning package within planning level *IDES125*. Which parameter settings have been made for parameter set *IDES125*?
Execute parameter set *IDES125*, in a production mode.
6. After executing distribution, check the postings the system makes.
Review report *IDES125* for the current year, version 5##, to examine the results for the current fiscal year.
Drill down to the individual product level. Are there any values at the product level?



Perform a Top-Down Distribution

Business Example

Your planners like to plan at a high level and then distribute the values to a lower level. You need to conduct a top-down planning run.

Plan miscellaneous sales quantities and revenues for material group **003**, in version **5##**. Then, distribute these planned values top-down based on the actual 2002 sales quantities and revenues.

1. Enter the planning figures for planning version **5##**, using the planning level *IDES125*. The planned values are for the current year.

Under planning level *IDES125*, create a new planning package, **Top##**, for your plan version.

Right-click planning level *IDES125* and select *Create Planning Package*.

Add the following data to your planning package:

Field Name or Data Type	Value
<i>Period/Year</i>	1 - 12 .XXXX
<i>Unit Inv. Qty</i>	CAR
<i>Version</i>	5##

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Planning* → *Edit Planning Data*.
- b) In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field.
- c) On the *Planning Framework: Overview* screen, in the *Planning levels* column, right-click *IDES25* and choose *Create Planning Package*.
- d) In the *Create Planning Package* dialog box, enter **TOP##** in the *Plan. package* field and choose *Continue*.
- e) On the *Selection* tab page, enter the following data to your planning package:

Field Name or Data Type	Value
<i>Period/year</i>	1 - 12 .XXXX
<i>Unit Inv. qty</i>	CAR
<i>Version</i>	5##

- f) Save your planning package.

2. Enter the planning data for the planning package you just created:

At the bottom-left of the screen, double-click the node to select plan parameter *IDES125*. Plan your values for material group *003*.

Field Name or Data Type	Value
<i>Material group</i>	003
<i>Planned quantity</i>	100,000
<i>Revenue</i>	200,000,000.00

a) On the *Planning Framework: Overview* screen, in the *Planning levels* column, choose *Planning methods* → *IDES 125* → *TOP##*.

b) In the *Planning methods* column, choose *IDES125* → *Enter planning* → *IDES125*.

Plan your values for the material group *003*.

Field Name or Data Type	Value
<i>Material group</i>	003
<i>Planned quantity</i>	100,000
<i>Revenue</i>	200,000,000.00

c) Save the entries and go back to the *SAP Easy Access* screen.

3. Display your plan postings using the report *IDES125*.

Field Name or Data Type	Value
<i>Period from</i>	001.Current Year
<i>Period to</i>	012.Current Year
<i>Plan/Act. Indicator</i>	1
<i>Version</i>	5##
<i>Record Type</i>	F

Drill down to the individual product level and double-click *Product*. Why are there values in the unassigned category?

a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Execute Report*.

b) On *Run Profitability Report: Initial Screen*, choose *IDES125* and choose the *Execute* pushbutton.

c) On the *Selection: Top-down distribution* screen, set the fields as follows:

Field Name or Data Type	Value
<i>Period from</i>	001.Current Year
<i>Period to</i>	012.Current Year
<i>Plan/Act. Indicator</i>	1
<i>Version</i>	5##

Field Name or Data Type	Value
<i>Record Type</i>	F

- d) Choose the *Execute* pushbutton. Go back to the previous screen.
- e) On the *Execute Profitability Report Top-down distribution* screen, in the *Navigation* column, choose *Product*. Drill down to the individual product level by double-clicking *Product*. Why are there values in the unassigned category?
Both the individual products and material types are selected in the report. The plan values for the product group are not assigned to the *Product* characteristic.
- f) Return to the *Selection: Top-down distribution* screen.
4. Using the same report, display the actual postings for January through December 2002. Use the actual indicator and record type **F**. Drill down to the product level for the material group 003.
If you want to perform a top-down distribution for the planned quantity and the planned revenue in version 5## and use the actual quantity as a distribution factor, what would the weighting factors be?
- a) Using the same report, show the actual postings for January to December 2002 on the *Selection Top-down distribution* screen.

Field Name or Data Type	Value
<i>Period from</i>	001.Current Year-10
<i>Period to</i>	012.Current Year-10
<i>Plan/Act. Indicator</i>	0
<i>Version</i>	Blank
<i>Record Type</i>	F

- b) Choose *Continue* and then choose the *Execute* pushbutton.
- c) On the *Execute Profitability Report Top-down distribution* screen, double-click *Product* in the *Navigation* column.
These will be the factors used by the top-down distribution.
- d) Exit the report and return to the *SAP Easy Access* screen.
5. Carry out the top-down distribution.
Return to the planning framework and select your planning package within planning level *IDES125*. Which parameter settings have been made for parameter set *IDES125*?
Execute parameter set *IDES125*, in a production mode.
- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Planning* → *Edit Planning Data* (KEPM).
- b) On the *Planning Framework: Overview* screen, in the *Planning levels* column, double-click *Planning levels* → *IDES125* → *TOP##*.
- c) In the *Planning methods* column, double-click *IDES125*.
- d) Choose *Continue* in the *Planning Framework: Information* dialog box.

- e) Choose the *Upd. run* pushbutton to run in the production mode.
The planning method will execute.
- f) Return to the *SAP Easy Access* screen.
6. After executing distribution, check the postings the system makes.
Review report *IDES125* for the current year, version **5##**, to examine the results for the current fiscal year.
Drill down to the individual product level. Are there any values at the product level?
- a) On the *SAP Easy Access* screen, choose *Controlling* → *Profitability Analysis* → *Information System* → *Execute Report*.
- b) On *Run Profitability Report: Initial Screen*, choose *IDES125* and then choose the *Execute* pushbutton.

- c) On the *Selection Top-down distribution* screen, set the following:

Field Name or Data Type	Value
<i>Period from</i>	001 .
<i>Period to</i>	012 .
<i>Plan/Act. Indicator</i>	1
<i>Version</i>	5##
<i>Record Type</i>	F

- d) Choose the *Execute* pushbutton.
- e) On the *Execute Profitability Report Top-down distribution* screen, double-click *Product* in the *Navigation* column and check the entries.
The values for *Product* are no longer unassigned. The unassigned values were distributed to the product level by the top-down distribution based on the 2002 actual values.
- f) In the *Exit Report* dialog box, choose the *Yes* pushbutton.
- g) Exit the report and return to the *SAP Easy Access* screen.



Outline Integrated Planning

Business Example

You want to transfer the planned quantities to SOP.

Read the online documentation to help you answer the following questions.

Open the SAP library, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Planning* → *Integrated Planning* → *Transfer Sales and Operations Planning (SOP)*.

1. Can you transfer the planning data to SOP from both costing-based CO-PA and account-based CO-PA?
2. Can the plan quantities be transferred to SOP at the product group level and the product level? If so, are there any special Customizing requirements in CO-PA?



Outline Integrated Planning

Business Example

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Read the online documentation to help you answer the following questions.

Open the SAP library, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Planning* → *Integrated Planning* → *Transfer Sales and Operations Planning (SOP)*.

1. Can you transfer the planning data to SOP from both costing-based CO-PA and account-based CO-PA?
 - a) No, you can transfer only the planning data from costing-based CO-PA.
2. Can the plan quantities be transferred to SOP at the product group level and the product level? If so, are there any special Customizing requirements in CO-PA?
 - a) Yes, the quantities can be transferred to the product group level. The prerequisite is that a characteristic for mapping the SOP product group has been created in the operating concern.



LESSON SUMMARY

You should now be able to:

- Perform planning manually and using automatic planning



Learning Assessment

1. The planning tool in CO-PA offers a uniform and straightforward graphical planning interface to which of the following users?

Choose the correct answers.

- A Power users
- B Users who confirm planning values
- C Administrators
- D Developers

2. You can execute planning in Profitability Analysis (CO-PA) on _____ levels.

Choose the correct answer.

- A two
- B three
- C five
- D multiple

3. Which of the following functions can be used to calculate new plan data automatically using the existing data?

Choose the correct answer.

- A Forecasting
- B Planning
- C Sales and Operation
- D Manual Planning



Learning Assessment - Answers

1. The planning tool in CO-PA offers a uniform and straightforward graphical planning interface to which of the following users?

Choose the correct answers.

- A Power users
- B Users who confirm planning values
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- D Developers

2. You can execute planning in Profitability Analysis (CO-PA) on _____ levels.

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- A two
- B three
- C five
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3. Which of the following functions can be used to calculate new plan data automatically using the existing data?

Choose the correct answer.

- A Forecasting
- B Planning
- C Sales and Operation
- D Manual Planning

Lesson 1

Executing Realignments

578

Exercise 33: Execute a Realignment

581



UNIT OBJECTIVES

- Execute a realignment



Executing Realignment

LESSON OVERVIEW

This lesson explains how to reorganize data after organizational changes have occurred.

Business Example

The management of your company wants to implement a profitability accounting application in your SAP system. As a member of the project team, you must recommend whether to implement Profitability Analysis (CO-PA) or classic Profit Center Accounting (EC-PCA). You will be responsible for implementing the selected applications.

The sales manager of the company has initiated changes in dealerships. To display the new data, you need to carry out reorganization. For this reason, you require the following knowledge:

- An understanding of realignment
- An understanding of how to execute a realignment



The realignment function enables organizational changes in the data structures for products, customers, or sales. For example, it reassigns sales districts to areas or products to product groups. After realignment has been carried out, only the new definition is recognized in the Information System and in planning. You can only display the characteristic values that were previously valid using line item reports. Because the existing profitability segments, (Ce4 Table!!), are adjusted to the new definition, all the objects posted to a profitability segment, such as sales orders or projects, and all the available documents, such as bills or Financial Accounting documents, are assigned to the characteristics in Profitability Analysis based on the new definition.

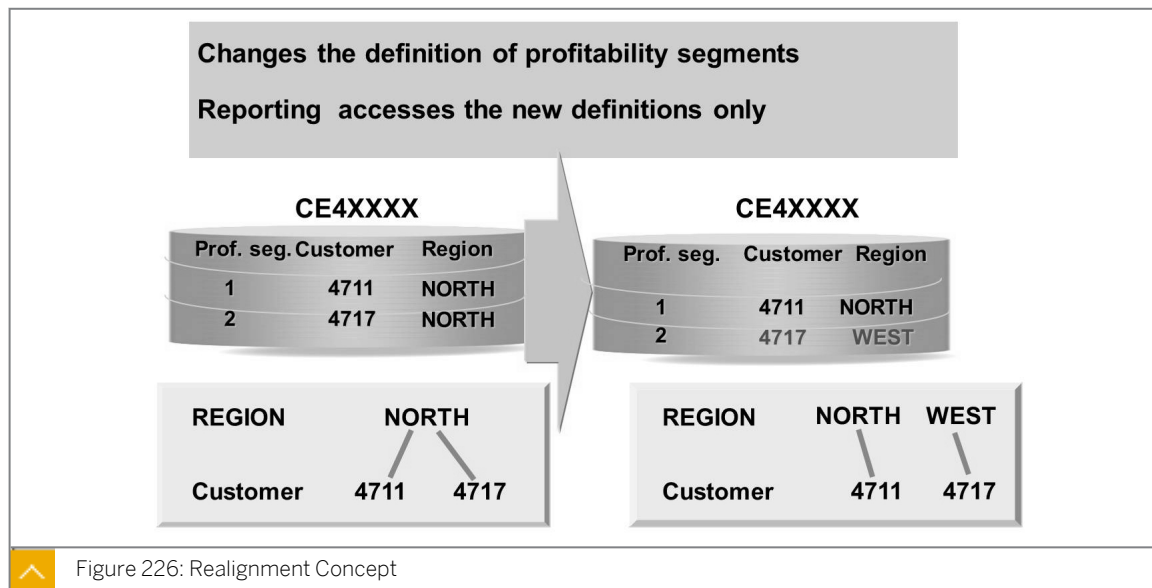


LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Execute a realignment

Realignment



The realignment function alters the definitions of the profitability segments in the database. Its primary use is to restate historic data so that it makes sense in the context of the current market situation. Note that you can also use it to correct the mistakes in CO-PA and populate the characteristics that you have recently added to an operating concern in the historic summary records.

Realignments alter the definitions of profitability segments and affect the historic data in the CO-PA data structures. Realignments, in effect, create new definitions for sales channels. After realignment, you can no longer analyze the old view in your drilldown reports. However, it is possible to analyze line items either from the old view or the new view.

Realignment is an excellent tool, but it affects the entire CO-PA summary database. The person performing realignment should have a working understanding of derivation logic to avoid making mistakes. You can achieve the reversal of realignments only under ideal conditions.

You can administer and execute realignments in the CO-PA menu. You can conduct realignments by executing a realignment run, for which you have to first define one or more realignment orders or requests. Each of these realignments determines how you can modify (as determined by a conversion rule) the selected profitability segments (as determined by the selection criteria).

With the selection criteria, you can specify the characteristic values to point out the profitability segments to be changed. With conversion rules, you can specify whether the characteristic values in the selected profitability segments are changed by overwriting them to some specific value. With conversion rules, you can also rederive new values and current derivation logic, or leave the old values.

Realignments in Operation

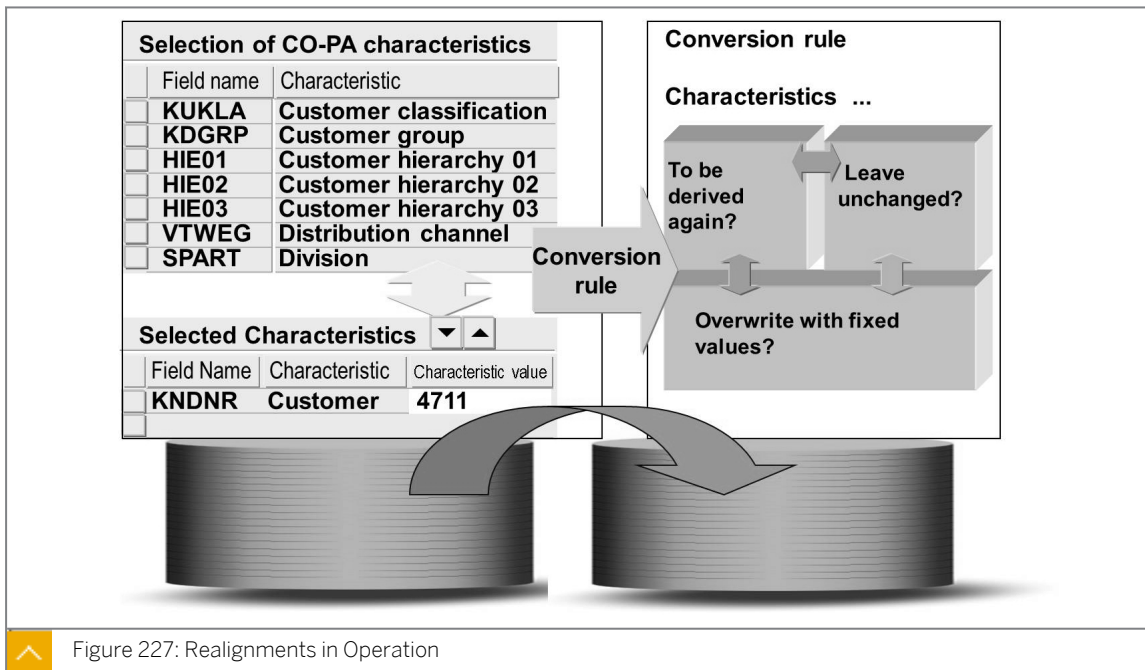


Figure 227: Realignments in Operation

You can execute realignments in the test mode before they are run to change the database. The test monitor is a flexible tool that you can use to show exactly what the effects of the realignment are, and why. It is highly recommended that you use the test monitor extensively when learning the tool.

You can execute realignments online or in the background from the *Transaction* screen. You can run multiple realignments simultaneously, unless two or more realignments specify that certain characteristics are to receive fixed values. To avoid discrepancies, these types of realignments should run in a sequence.

Reversing a realignment using the restore function has the effect of restoring the definitions of the profitability segments that were changed to the definitions prior to that time. Reversal is only possible if the definition of the realignment run has been preserved.

Realignments affect both costing-based and account-based CO-PA because both the submodules share the same profitability segment definitions in the database.

Realignments invalidate both frozen data and data in summarization levels. It means that after a valid realignment run, you have to construct both these items again from scratch.



How to Execute a Realignment



Demonstrate the steps listed in the Execute a Realignment exercise.

Unit 12

Exercise 33



Execute a Realignment

Business Example

Your company has decided to change the industry related to your customer. You want to report according to this new organizational alignment.

Create and execute a realignment run.

Task 1

Display the line item created for your customer and view the *Industry* characteristic.

1. View the line item created for your customer and note the characteristic value for the *Industry* characteristic.

Task 2

Set up a realignment run for the customer number allocated to you, *T-CO05A##*. Each realignment run summarizes a number of realignment requests. A realignment request consists of a selection condition and a conversion rule.

1. Create a realignment run.
Name the run **Industry Group##**. ## is the number assigned to you. Choose *Enter*.
2. Carry out the realignment run in update mode.
3. View your line items again.
What if you select *Read according to the current structure*?
What if you select *Read as posted*?



Execute a Realignment

Business Example

Your company has decided to change the industry related to your customer. You want to report according to this new organizational alignment.

Create and execute a realignment run.

Task 1

Display the line item created for your customer and view the *Industry* characteristic.

1. View the line item created for your customer and note the characteristic value for the *Industry* characteristic.
 - a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Actual Postings* → *Display Line Items* (KE24).



Hint:

In the *Set Operating Concern* dialog box, enter **IDEA** in the *Operating concern* field, select the *costing-based* radio button, and choose *Continue*.

- b) On *Display Actual Line Items: Initial* screen, enter the following data: Then, choose *Goto* → *Variants* → *Save as Variant*.

Field Name or Data Type	Value
<i>Currency Type</i>	BO
<i>Period/year</i>	001.Current Fiscal Year
<i>Entered by</i>	Your User ID
<i>Customer</i>	T-CO05A##
<i>Mode of access</i>	Read acc. to current structure

- c) On the *Variant Attributes* screen, enter **GR##** in the *Variant Name* field and **Group##** in the *Description* field and then save the *Variant*.
 - d) On *Display Actual Line Items: Initial* screen, choose the *Execute* pushbutton to execute the *Line Item Report*.



Note:

If you receive the warning that you have not sufficiently restricted the selection criteria, choose *Enter*.

- e) On the *Display Actual Line Items: List* screen, choose *Settings* → *Layout* → *Change*.
- f) In the *Change Layout* dialog box, on the *Displayed Columns* tab page, select the *Industry* value from the *Column Set* pane and choose the *Add char.* pushbutton.
- g) Choose the *Save As* pushbutton.
- h) In the *Save as* dialog box, enter **Industry##** in the *Layout* and the *Name* fields, select the *User-Specific* and the *Default* checkboxes, and then choose *Enter* twice.
- i) View the *Industry*. The *Industry* is *HITE* (High Tech).
- j) Return to the *SAP Easy Access* screen.

Task 2

Set up a realignment run for the customer number allocated to you, *T-CO05A##*. Each realignment run summarizes a number of realignment requests. A realignment request consists of a selection condition and a conversion rule.

1. Create a realignment run.

Name the run **Industry Group##**. ## is the number assigned to you. Choose *Enter*.

- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Master Data* → *Maintain Realignments* (KEND).
- b) On the *CO-PA: Maintain Realignments* screen, choose the *Create Realignment Run* pushbutton.
- c) In the *Create Realignment Run* dialog box, enter **Industry Group ##** in the *Realignment run short text* field and choose the *Accept* pushbutton.
- d) On the *CO-PA: Maintain Realignments* screen, select the *Industry Group ##* node and choose the *Create Request* pushbutton.
- e) On the *CO-PA: Maintain Realignments* screen, enter **Customer T-CO05A##** **Industry** in the *Realign. request* field. On the *Selection Condition* tab page, under the *Selection of CO-PA Characteristics* pane, select the *Customer* value row and then choose the *Move Field* pushbutton to move it to the *Selected characteristics* pane.




Note:
Enter *INDUSTRY* and *CUSTOMER* in capitals.

- f) Enter **T-CO05A##** in the *Char. Value* field and then choose *Enter*. You should see the name *Becker* when you choose *Enter*.





Note:
Most likely, you would not realign just one customer's industry, but rather a group of customers. In the class, however, each student will realign their customer only.

- g) On the *Convers Rule* tab page, select the *BRSCHE* value row from the *Characteristics NOT to be changed* pane and then choose  (*move field*) to move the row to the *Characteristics to have value replaced w* pane.
- h) Under the *Characteristics to have value replaced w* pane, enter **CHEM** in the *Char. Value* field and choose *Enter*. You can see the value in the *Name* field now.



Note:

Typically, we would let the system derive the values again from the customer master data tables. (Move the field to the *Characteristics to be derived again* pane.) But in our system, the master data has not changed, so we are hard-coding the change.

- i) Choose  (*Back*) to return to the *CO-PA: Maintain realignments* screen.
 - j) Save the realignment request.
Your request should have the status *New*.
2. Carry out the realignment run in update mode.
- a) On the *CO-PA: Maintain Realignments* screen, select the *Industry Group ##* node and then choose *Run/request* → *Execute* → *With starting time*.
 - b) In the *Enter Name for Background Job* dialog box, leave the name of the job as is, deselect the *Test mode* radio button, and then choose *Accept* pushbutton.
 - c) In the *Start time* dialog box, choose the *Immediate* pushbutton and then choose *Save*.
 - d) To refresh the status of the realignment run, choose the *Status* pushbutton until you see your job is *Successful*.
 - e) Return to the *SAP Easy Access* screen.
3. View your line items again.
- What if you select *Read according to the current structure*?
- What if you select *Read as posted*?
- a) On the *SAP Easy Access* screen, choose *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Display Line Item List* → *Actual (KE24)*.
 - b) On *Display Actual Line Items: Initial Screen*, choose *Goto* → *Variants* → *Get*.
 - c) In the *ABAP: Variant Directory of Program RKEB0601* dialog box, select the *GR##* variant, choose *Continue*, and then choose the *Execute* pushbutton.
 - d) Your layout with *Industry* should display since you saved that as the default layout. What industry do you see?
The *Industry* has been realigned to *CHEM*.
 - e) Choose  (*Back*) to return to *Display Actual Line Items: Initial Screen*.
 - f) On *Display Actual Line Items: Initial screen*, choose the *Read as posted* radio button under the *Mode of access* pane and choose the *Execute* pushbutton.
The *Industry* shows as originally posted, *HITE*.

g) Return to the *SAP Easy Access* screen.



LESSON SUMMARY

You should now be able to:

- Execute a realignment



Learning Assessment

1. Realignments in an operation affect _____, _____, and _____.

Choose the correct answers.

- A frozen data
- B costing-based profitability analysis
- C summarization levels
- D account-based profitability analysis



Learning Assessment - Answers

1. Realignments in an operation affect _____, _____, and _____.
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- B costing-based profitability analysis
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