

- R/3
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- December 2000
- Material number 5004 3790

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SAP

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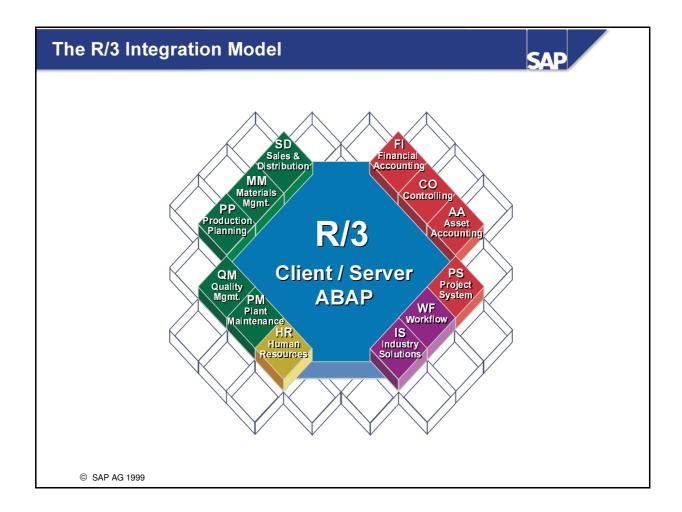
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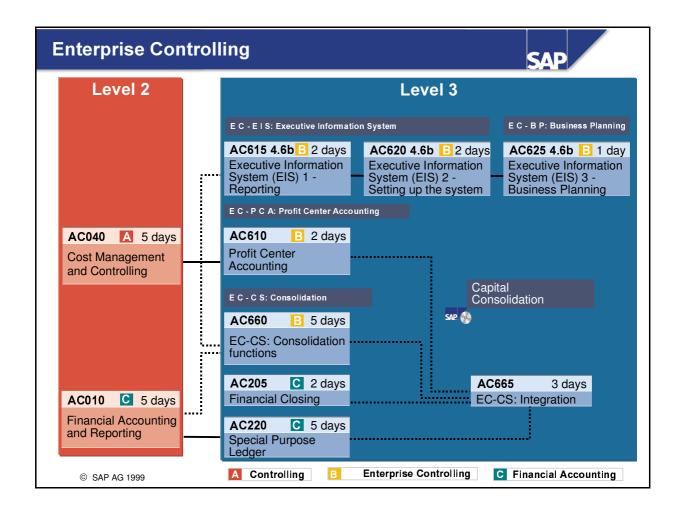
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# **Target Group**



- Project team members
- Objective: The participants will become familiar with the FI-SL functionality and will learn how to use the various FI-SL components. They will also gain knowledge of the most important control and data processing techniques.

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#### Notes to the user

■ The training materials are not teach-yourself programs. They complement the course instructor's explanations. On the sheets, there is space for you to write down additional information.

# Introduction



- Course Goals
- Course Objectives
- Course Content
- Course Overview Diagram
- Main Business Scenario

#### **Course Goals**





This course will enable you to:

- Acquire conceptual knowledge and hands on experience of managing data and reporting in FI-SL
- Become familiar with the FI-SL functionality and learn how to use the various FI-SL components

## **Course Objectives**





At the conclusion of this course, you will be able to:

- Explain the main purpose of FI-SL and the flow of information into the system
- Identify the basic characteristics and key figures of the FI-SL environment and determine the requirements to establish a new field for FI-SL
- Define a new coding block field in test mode
- Define a new table group in the repository and install a table group in FI-SL

## **Additional Course Objectives**





At the conclusion of this course, you will be able to:

- Identify preliminary resource issues prior to populating the FI-SL database
- Create FI-SL master data, define the organisational structure of FI-SL and list the options for summary and single item data to be stored in the ledgers
- Transfer data into FI-SL from outside the application area
- Create adjustment postings in FI-SL using versions

## **Additional Course Objectives (1)**





At the conclusion of this course, you will be able to:

- Identify preliminary resource issues prior to populating the FI-SL database
- Create FI-SL master data, define the organisational structure of FI-SL and list the options for summary and single item data to be stored in the ledgers
- Transfer data into FI-SL from outside the application area
- Create adjustment postings in FI-SL using versions

## **Additional Course Objectives (2)**





At the conclusion of this course, you will be able to:

- Analyse the master data settings and postings to Special Purpose Ledger using the Display and Diagnostic tools
- Explain the need for Validation and Substitution in FI-SL. Define and use both
- Specify the different types of Sets and Variables, identify the areas in FI-SL where they are used and create sets and variables for use in FI-SL

# **Additional Course Objectives (3)**





At the conclusion of this course, you will be able to:

- Define reports using Report Painter and execute reports using a report group
- Define the planning parameter components, enter plan data and control the results of planning in FI-SL
- Create Allocation segments and cycles and perform allocations in FI-SL
- Define and execute Rollups in FI-SL

#### **Contents**



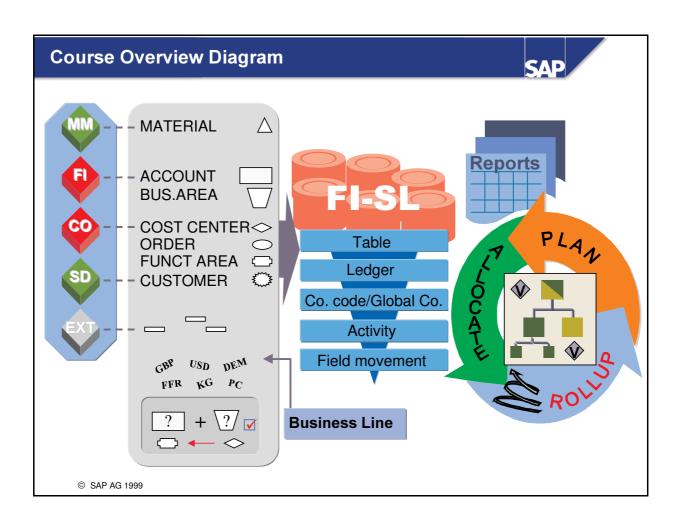
#### **Preface**

- Unit 1 Introduction
- Unit 2 FI-SL: Special Reporting Requirements
- Unit 3 Characteristics and Key Figures
- Unit 4 Defining the Table Requirements
- Unit 5 Setting up the FI-SL Environment
- Unit 6 Through Postings and Adjustments

# Contents (cont.)



- Unit 7 Validations, Substitutions and Rules
- Unit 8 Sets and Variables
- Unit 9 Report Painter
- Unit 10 Planning
- Unit 11 Allocations
- Unit 12 Rollups
- Unit 13 Conclusion
- Appendices



### **Main Business Scenario (1)**





- Our Company has a fairly rich management reporting requirement. Most of the information needed comes from other application areas but must be regrouped and further enhanced as well as being in some cases refined to provide summarized data in chosen combinations. The concepts and design of the component FI-SL must be investigated to discover whether it is flexible enough to serve these special needs
- Management responsibility crosses Line of Business and product lines. The costs involved in supporting the sale of products have to be analysed against the revenues they have produced.

#### **Main Business Scenario (2)**





- A specific requirement is to provide a breakdown of these costs by 'functional areas' such as manufacturing, general administration, sales and research & development. Is FI-SL able to derive this information and how could this be reported?
- Later these functional area costs will have to be set against the revenues generated in Line of Business' (new characteristic), and used for allocation, planning, further aggregation and other reports.

# FI-SL Special Reporting Requirements



- FI-SL: Information Processing
- Standard Ledgers and Special Purpose Ledgers
- SAP Structures and Customer-Defined Structures
- Integration
- Special Requirements
- FI-SL Example

#### FI-SL: Special Reporting Requirement: Objectives





At the completion of this unit, you will

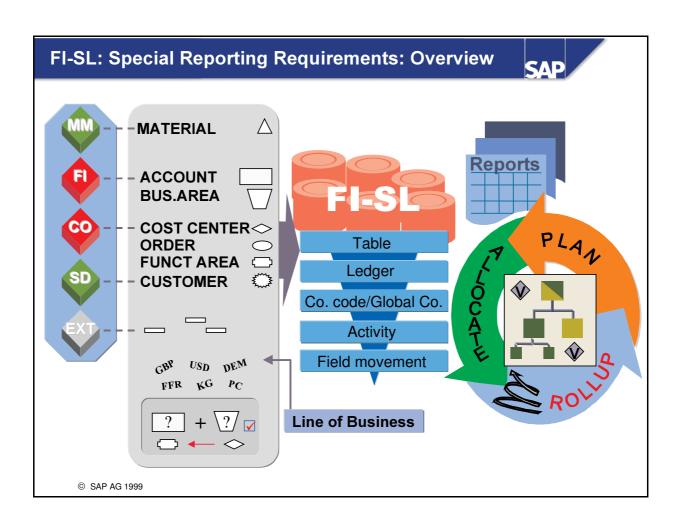
- be familiar with the 'Special Purpose Ledger' concept and its main objectives
- know what distinguishes FI-SL from the other SAP applications and understand the role it plays in the SAP accounting system
- gain an overview of the various FI-SL functions
- identify, with the help of an explicit example
- update of data for a profit and loss statement in cost-of-sales accounting format and breakdown of functional area costs
- how the FI-SL system can reply to the needs of special purpose reporting requirements

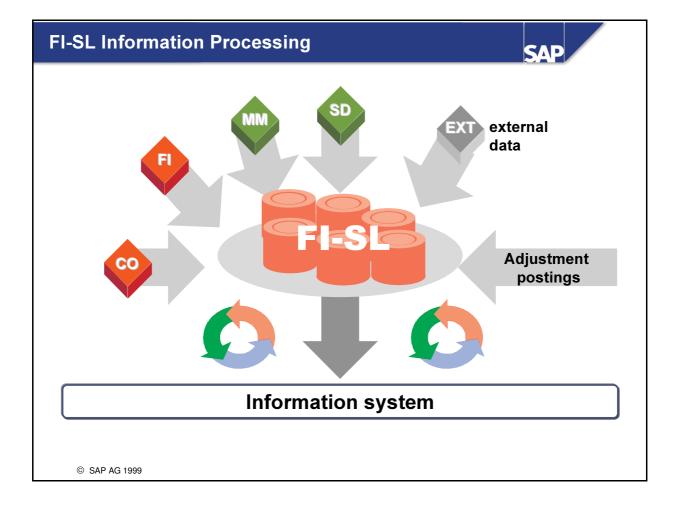
# FI-SL Special Reporting Requirements: Business Scenario



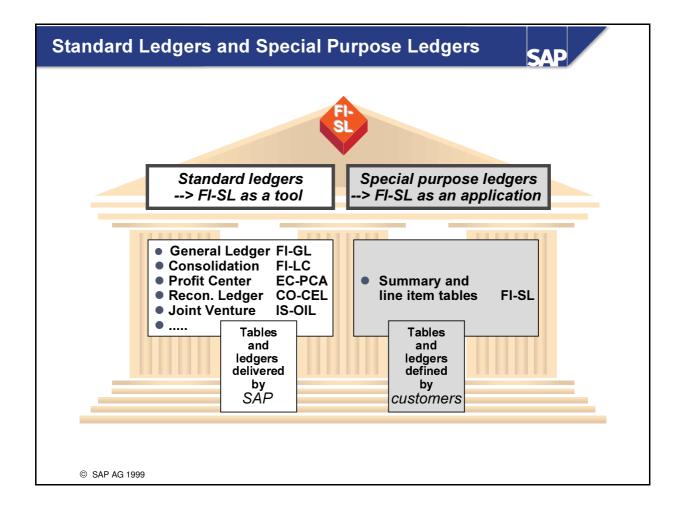


- Most of the information for our Enterprise comes from other application areas but must be regrouped and further enhanced as well as being in some cases refined to provide summarized data in chosen combinations. The concepts and design of the component FI-SL must be investigated to discover whether it is flexible enough to serve these special needs
- A specific requirement is to provide a breakdown of these costs by 'functional areas' such as manufacturing, general administration, sales and research & development. Is FI-SL able to derive this information and how could this be reported?





- Collection of information (from other SAP applications: FI, CO, MM, SD, (external) data transfer and FI-SL adjustment postings) in user-defined tables for reporting purposes.
- Update and accumulation of data during data transfer.
- Additional processing functions in FI-SL: planning, allocations, rollup, currency translation, balance carry forward.
- Flexible evaluation options in reporting (Report Painter, Report Writer).



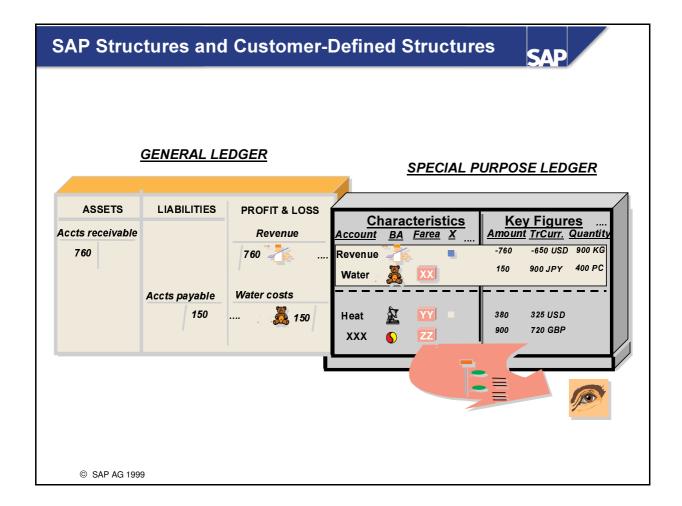
- Ledgers are divided up into two groups:
  - · Standard ledgers
  - Special purpose ledgers

#### ■ Standard Ledgers:

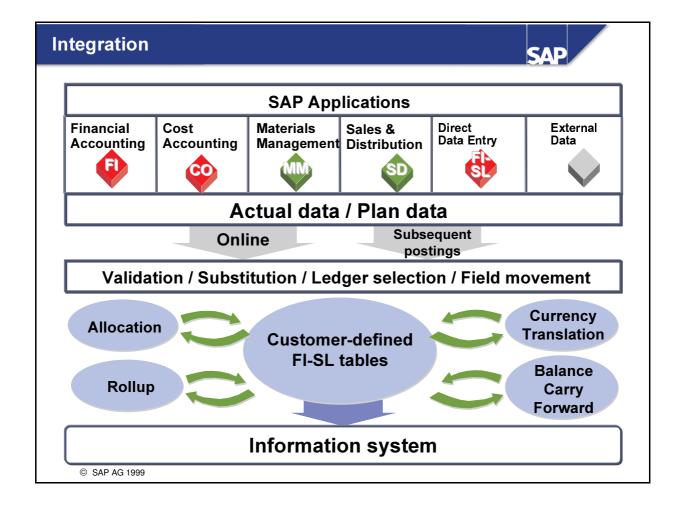
• Standard ledgers are configured and delivered by SAP. The data model as well as precisely defined functionality for specific business requirements are available. Example: General ledger, reconciliation ledger, profit center ledger, consolidation ledger. FI-SL functionality is integrated into the respective application.

#### **■** Special Purpose Ledgers:

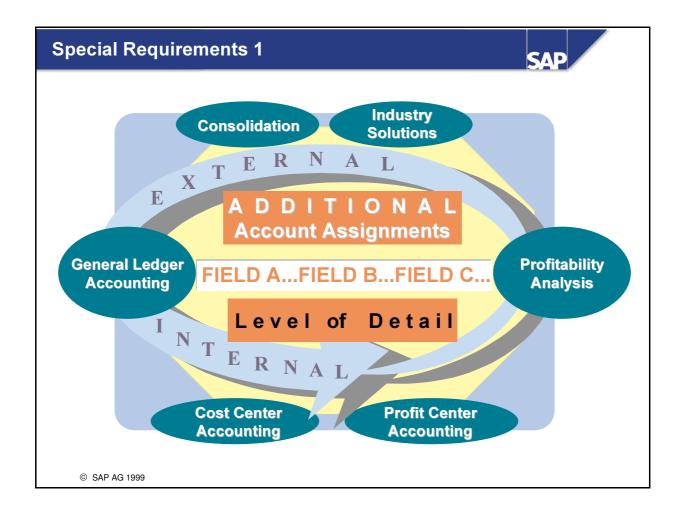
- Special purpose ledgers are user-defined ledgers that can be maintained in the FI-SL application
  using any account assignments as general ledgers or subledgers.
  Using the FI-SL installation programs, the user can create databases according to his/her own
  needs.
- Accounting values on user-defined account assignments can be stored as summary and line item tables for reporting purposes in FI-SL.



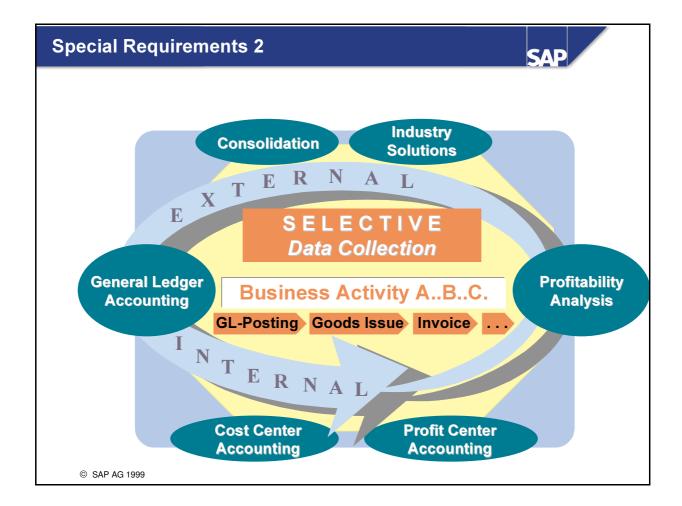
■ Even though the standard delivered SAP table structures are fixed, you can create your own table structures in FI-SL to contain flexible combinations of characteristics.



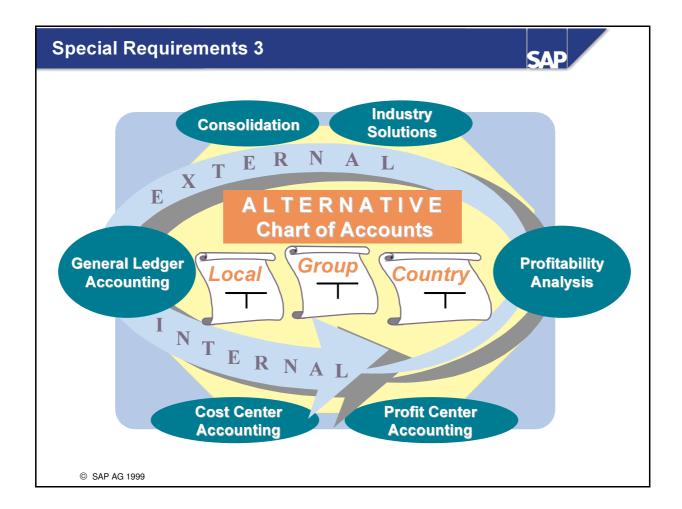
- Using FI-SL, you can collect data from other SAP applications (FI, CO, MM, SD) as well as from external systems and FI-SL adjustment postings for reporting purposes.
- The FI-SL system is completely integrated with the other SAP systems. Modifications to the other SAP applications are therefore not necessary.
- During data transfer, data can be changed or accumulated.
- In FI-SL, you can process data using planning, allocations, rollups, currency translation and balance carry forward (periodic processing).
- The information system in FI-SL (Report Painter / Report Writer) offers flexible reporting and evaluation of the data.



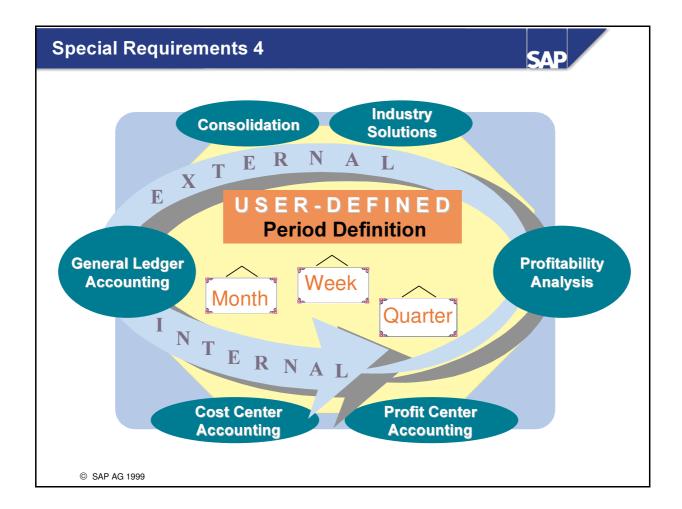
■ Special Purpose Ledger can be used to report on additional fields (-> additional levels of detail, totals for specific field combinations).



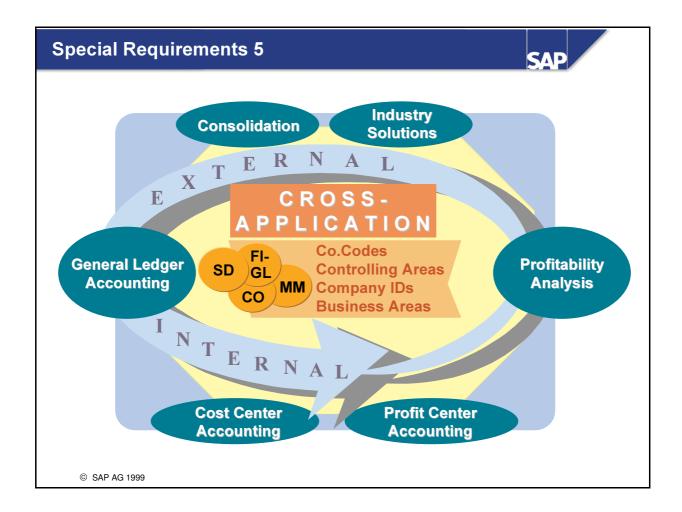
■ Special Purpose Ledger can be used for selective data collection (-> activity assignment, ledger selection).



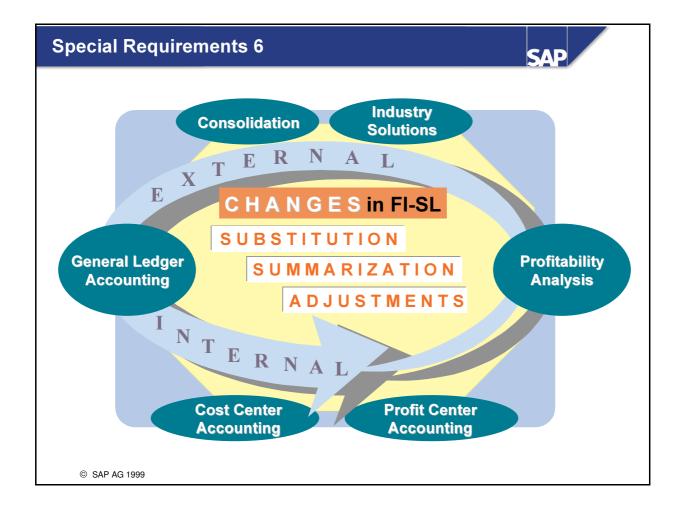
■ Special Purpose Ledger can be used to update alternative charts of accounts (→ operating, country, corporate) and to also use a non-calendar fiscal year (→ foreign subsidiary, corporate group).



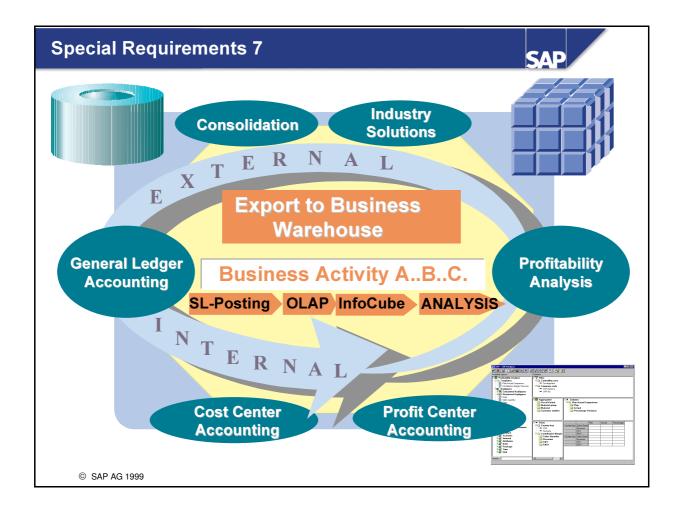
■ Special Purpose Ledger can be used to determine your own period definitions (day, week, month,...).



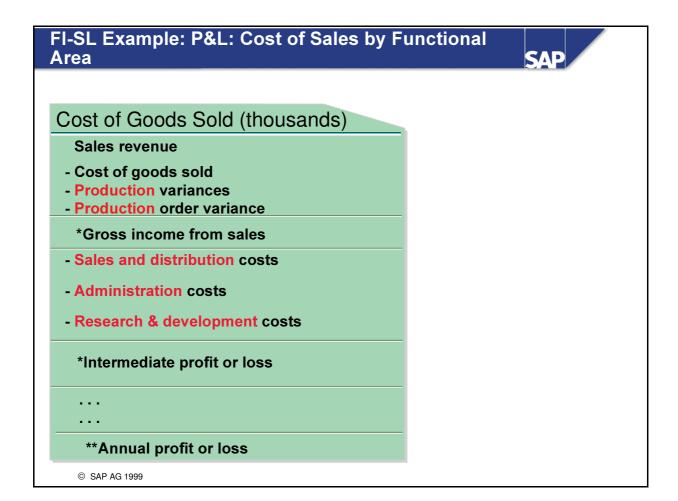
■ Special Purpose Ledger can be used for evaluations that affect several applications and several organizational units.



■ Special Purpose Ledger can be used to make changes in FI-SL during data update (substitutions, summarizations).



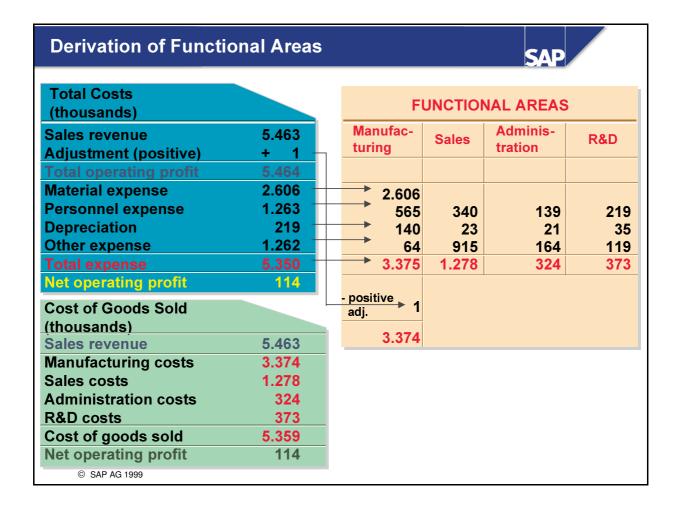
■ Special Purpose Ledger can be used for selective data collection (→ activity assignment, ledger selection).



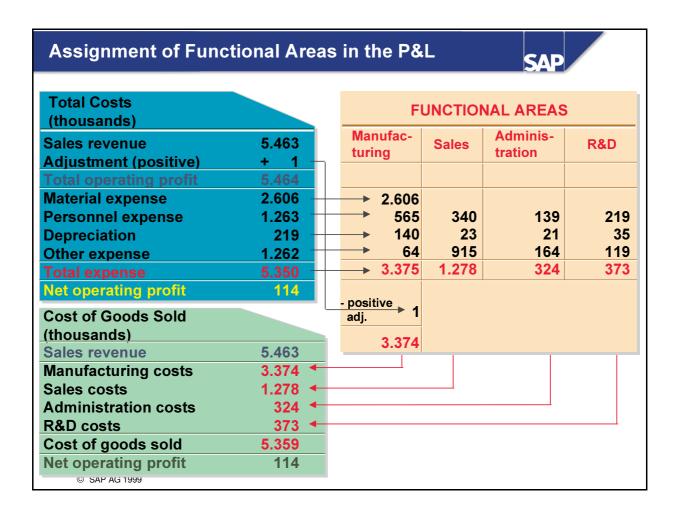
■ This slide shows a simplified FI-SL example report of a P&L Statement showing the costs of goods sold with a breakdown of the functional area costs, production, sales and distribution, administration and research and development.

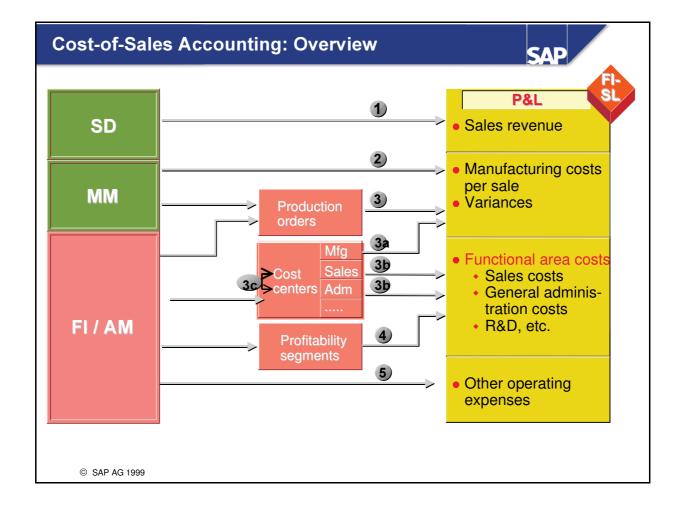
Total Costs	
(thousands)	
Sales revenue	5.463
Adjustment (positive)	+ 1
Total operating profit	5.464
Material expense	2.606
Personnel expense	1.263
Depreciation	219
Other expense	1.262
Total expense	5.350
Net operating profit	114
Cost of Goods Sold	
(thousands)	
Sales revenue	5.463
Manufacturing costs	3.374
Sales costs	1.278
Administration costs	324
R&D costs	373
Cost of goods sold	5.359
Net operating profit	114
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- This slide illustrates two methods of calculating the profit and loss statement for a company:
  - period accounting, which uses total costs
  - cost-of-sales accounting, which uses the cost of goods sold
- In the total costs schema, the profit and loss statement is divided into individual income and expense types.
- The total operating profit for this accounting period is compared to the expenses made in the period.
- In cost-of-sales accounting, the sales revenues of the accounting period are balanced against the manufacturing costs incurred for the services rendered. The system assigns expenses according to priority to the functional areas in the company (production, sales, administration and so on). Expenses and revenues that cannot be allocated to functional areas are to be displayed in other P/L statement items that are classified by expense and revenue types.



■ By breaking down costs into functional areas of manufacturing, sales and distribution, administration, and research and development, cost-of-sales accounting shows why costs accrued in an enterprise and indicates the economic purpose of the expense.





- For all expense postings, the functional area FAREA can be derived from existing account assignments, such as cost center and/or cost element or production order, and recorded in the document line.
- A different ledger is stored in FI-SL in addition to the general ledger FI-GL. All FI-related business transactions can be updated in this ledger.
- In contrast with the general ledger, the transaction figures are subdivided into functional areas.
- This slide is used to demonstrate how FI-SL can be used.
- The following are the example postings represented in this slide:
  - Sales revenue engendered in the SD-module
  - Cost of goods sold at standard in MM-Goods Issue
  - Manufacturing variances arising from the settlement of the production order
  - All credits and debits on all production cost centers (over-under absorption)
  - All postings to cost centers with derivation of the functional areas sales, general administration, research and development
  - Correction postings back to FI-SL from the Reconciliation Ledger in the case of secondary crossfunctional area postings
  - Postings to profitability segments
  - Other non-operating expenses

### FI-SL: Special Reporting Requirements: Summary





- In this unit your attention was focused on the scope, main functionality and objectives of the FI-SL system
- You were shown how the FI-SL system is integrated with the other SAP application areas
- In particular you were introduced to the main idea of addressing special reporting needs by combining information from selected feeder applications at a degree of detail which the user can freely define
- As one example of using FI-SL, you were shown how information resulting in the 'cost-of-sales format' was gathered and how costs broken down by 'functional area' were derived and stored

## **Exercise Data Sheet**

## **Key to Icons in Exercises and Solutions**

?	Exercises
	Solutions
	Objectives
1	Business Scenario
=	Hints and Tips
4	Warning or Caution

### **Data Used in Exercises**

Data	Data in Training System	Data in IDES System
Company Code	AC01-AC18, 1000	1000
Business Areas	0001,1500,8000,9000	0001,1500,8000,9000
	RETL, WSLE	
Functional Areas	0100,0300,0400,0500	0100,0300,0400,0500
Customers	T-F20A01-18	1000
Materials	T-IC-F1001 - T-IC-F1003 T-IC-R2007 - T-IC-R2009	T-IC-F1001 - T-IC-F1003 T-IC-R2007 - T-IC-R2009
Accounts	399999,420000,421000, 430000, 431000,465000 472000,476000,800200, 800300, 800400	399999,420000,421000, 430000, 431000,465000, 472000,476000,800200
Ledgers	00,0F	00,0F
Cost Centers	T-AC20A01-18	1000
	T-AC20B01-18	3110
	T-AC20C01-18	4130
	T-AC20D01-18	4120
	T-AC20E01-18	4500
Controlling Area	1000	1000
Report	0F-GUV1, 0F-PER	0F-GUV1, 0F-PER
Report Group	0F01	0F01
Library	0F1, L01-18	0F1

Tables	GLT0	GLT0
	GLT1	GLT1
	GLFUNCT	GLFUNCT

	GLU1	GLU1
Customer Coding Block Field	ZZLOB	ZZLOB
Rule	&SELLOB	
Fast entry screen template	DEMO1	DEMO1
Account assignment models	GL-SL01 DR-SL02	
User Exits	Variable Field Movement U55	Variable Field Movement U55
	Rollup Field Movement Header D02	Rollup Field Movement Header D02
Activities	RFBU, RGL0	RFBU, RGL0

## **Exercises**





# **Unit: FI-SL: Special Reporting Requirements Topic: Standard Ledgers and Special Purpose Ledgers**

#### : Special Reporting Requirements

At the conclusion of this exercise, you will be able to:

- Name 5 of the application areas where Standard Ledgers are used and state the main differences between these Standard Ledgers and Special Purpose Ledgers
- List the main features of Special Purpose Ledgers which go beyond the restrictions of standard ledgers and offer enhancements to the standard
- Execute a standard delivered Report Group example showing a breakdown of the Profit & Loss Statement (Cost of Goods Sold) by functional areas and discover the original documents for the functional area costs shown in the report output



Most of the information for our Company comes from other application areas but must be regrouped and further enhanced as well as being in some cases refined to provide summarized data in chosen combinations. The concepts and design of the component FI-SL must be investigated to discover whether it is flexible enough to serve these special needs.

A specific requirement is to provide a breakdown of these costs by 'functional areas' such as manufacturing, general administration, sales and research & development. Is FI-SL able to derive this information and how could this be reported?

What di	stinguishes	'Special l	Purpose 1	Ledgers':	from 'Sta	ndard Ledge

-	t 'P&L Cost of Sales Accounting' from your reporting for (Report Group 0F01).
Menu Path:	
SAP Easy Access Cost of Sales Acc	: →Activity Group SL:Reporting_Analyst →Reporting ounting
Selection values:	
Ledger:	0F
Fiscal Year:	Current Year
Period From:	Current Period
Period To:	Current Period
Company Code:	1000
Plan Version:	0
Note down the fol	lowing totals you see:
Act. local	
Act. local Sales revenue:	
Sales revenue:	

Drill down to the account totals by double clicking on the line and with a second double click on the account/actual amount brings up the report selection for 'Actual line items for table GLFUNCT'.

This will bring you to the display of the FI-SL Single Items.

With another double click on the Single-Item Line, you will be brought to the original document or you can select the button for Accounting Document.

Your task is to note down the following:

$\alpha$	D
19 PC	Revenue
Daits	1XC / CHUC

Account Doc. No. Billing Document # Sales order item Item Description Billed QTY

Functional Area Sales

Account Doc. No. Document # (FI) Cost Center or Original Order

Functional Area Administration

Account Doc. No. Document # (FI) Cost Center or Original Order

Functional Area Research & Development

Account Doc. No. Document # (FI) Cost Center or Original Order

### **Solutions**



**Unit: FI-SL: Special Reporting Requirements** 

**Topic: Standard Ledgers and Special Purpose Ledgers** 

: Special Reporting Requirements

- 1-1 List 5 of the application areas where 'Standard ledgers' are delivered by SAP
  - 1.) General Ledger FI-GL
  - 2.) Legal Consolidation FI-LC
  - 3.) Profit Center Accounting EC-PCA
  - 4.) Reconciliation Ledger CO-CEL
  - 5.) Joint Venture IS-OIL
- 1-2 What distinguishes 'Special Purpose Ledgers' from 'Standard Ledgers'?

**Standard** ledgers are configured and delivered by SAP. The data model as well as precisely defined functionality for specific business requirements is already set within the individual applications

**Special purpose ledgers** are **user-defined ledgers** designed to meet your specific business requirements according to the dimensions you specify. Special purpose ledgers are the only types of ledger you can create within the FI-SL System.

- 1-3 List some of the 'special reporting requirements' which could make FI-SL attractive for users as an enhancement on the standard application areas in Accounting.
  - 1.) Special Purpose Ledger can be used to report on additional fields (-> additional levels of detail, totals for specific field combinations).
  - 2.) Special Purpose Ledger can be used for selective data collection (-> activity assignment, ledger selection)
  - 3.) Special Purpose Ledger can be used to update alternative charts of accounts (-> operating, country, corporate) and to also use a non-calendar fiscal year (-> foreign subsidiary, corporate group)
  - 4.) Special Purpose Ledger can be used to determine your own period definitions (day, week, month, ...) for holding summary values
  - 5.) Special Purpose Ledger can be used for evaluations that affect several applications and several organizational units (Company Codes, Company ID's, Business and Controlling Areas)
  - 6.) Special Purpose Ledger can be used to make changes in FI-SL during data update (substitutions, summarization's)

#### • Advantages of using the Special Purpose Ledger (FI-SL) System

The FI-SL System is designed as a tool, allowing you to extend and enhance the functions offered in other SAP applications (such as General Ledger Accounting (FI-GL), Profit Center Accounting (EC-PCA), Cost Center Accounting (CO-CCA)) without having to make modifications to the standard system. You can, for example, use FI-SL to include additional coding block dimensions in your own database tables. Other advantages of the FI-SL System include:

#### • Flexible database structures with additional fields

You can create your own database tables and define non-standard dimensions (for example, special region or line of business) to meet your specific business and reporting requirements. This allows you to combine and summarize information at the level of detail you require for any account assignment combinations.

#### Selective data collection

The data flow in FI-SL is not fixed. By assigning activities to specific local company/ledger or global company/ledger combinations, you determine which ledgers are updated with data. You can further restrict the ledgers that are updated by entering ledger selection conditions.

#### Adjustment postings

In FI-SL you can make adjustment or correction postings. You can, for example, post data to a different version. Adjustment postings are useful, for example, for depreciation purposes.

#### Alternative chart of accounts

You can use several alternative charts of accounts in FI-SL (operative, corporate and country-specific chart of accounts).

#### • Alternative fiscal year using different fiscal year variants

In FI-SL you can designate your own accounting period definitions for your system. Accounting period definitions determine the fiscal calendar, which defines the fiscal year and the posting periods within the fiscal year.

By defining your own accounting periods, you can, for example, report on a weekly or monthly basis.

#### • FI-SL-specific changes during data update

To ensure that only valid data enters the FI-SL System, you can use the validation and substitution software to validate and/or substitute data at the time of entry into the FI-SL System.

#### • Summarized line item information from other sources

By using the variety of functions provided by FI-SL, you can summarize, modify and allocate actual and plan data that originates from other SAP and external sources.

#### • Reporting across the entire SAP System

The FI-SL System allows you to evaluate and report on data from several SAP applications and organizational units.

1-4 Execute the report 'P&L cost of sales accounting' from the Application Tree Report Selection in Special Purpose Ledger (Report Group 0F01).

#### Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup Select\ report 
ightharpoonup Cost\ of\ Sales\ Reporting 
ightharpoonup P\&L\ cost\ of\ sales\ accounting$ 

Selection values:

Ledger: **0F** 

Fiscal Year: Current Year

Period From: Current Period

Period To: Current Period

Company Code: 1000

Plan Version: 0

Note down the following totals you see:

Act. Local

Sales revenue:

Cost of Goods Sold:

Administrative costs:

Research & Development:

Amounts have been entered by the instructor in the course of the demonstration in the system and are therefore variable.

With double click, drill down to the account totals and with a second double click on the account actual amount bring up the report 'Actual line items for table GLFUNCT'.

This will bring you to the display of the FI-SL Single Items.

With another double click on the Single-Item Line, you will be brought to the original document.

#### Your task is to note down the following:

Sales Revenue

Account Doct.number Billing Doct.number Sales order item Item Description Billed QTY

800000

Functional Area Sales

Account Doc. No. Document # (FI) Cost Center or Original Order

476000

Functional Area Administration

Account Doc. No. Document # (FI) Cost Center or Original Order

431000

Functional Area Research & Development

Account Doc. No. Document # (FI) Cost Center or Original Order

430000

Apart from the accounts that the instructor has used in the postings, the other information regarding document numbers, cost centers or orders and amounts are variable, depending on the instructor's discretion in the choice of the example postings demonstrated.

## **Characteristics and Key Figures**



- The Coding Block in the SAP-System
- Additional Fields (Characteristics)
- Alternative Solutions
- Maintaining the Coding Block
- Basic and Expert Modes
- Critical Notes
- Availability of the New Fields (Characteristics)
- Key Figures

## **Characteristics and Key Figures: Objectives**





At the completion of this unit, you will

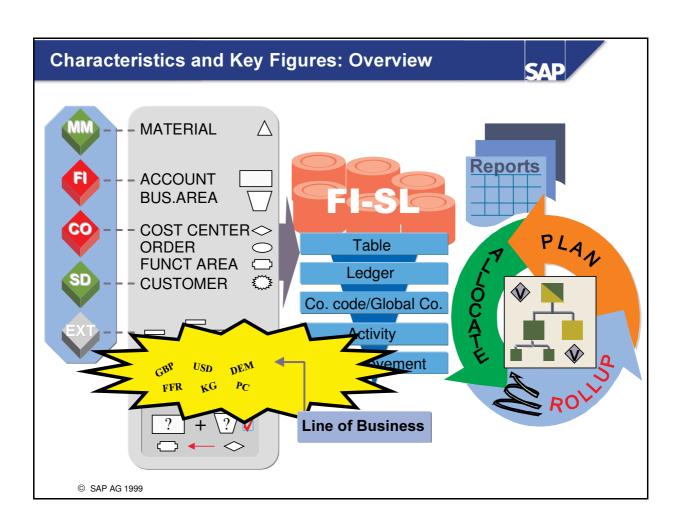
- know how to include your own field (characteristic) in the coding block of the SAP system
- know how to use the basic mode and name the steps required when using the expert mode
- be familiar with the key figures stored for the combinations of characteristics in the FI-SL system

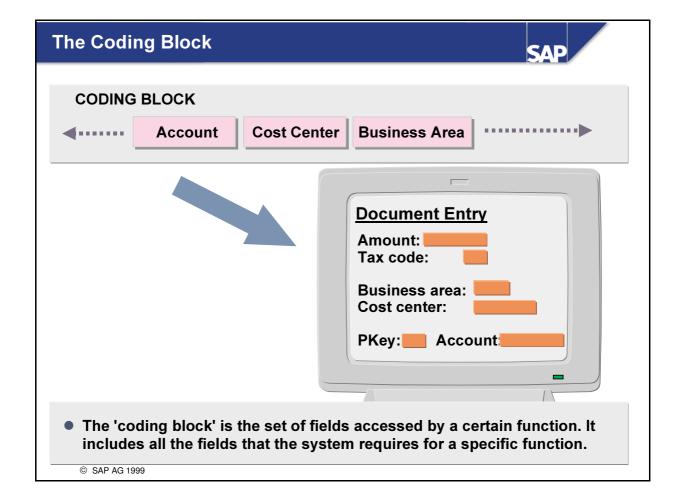
## Characteristics and Key Figures: Business Scenario



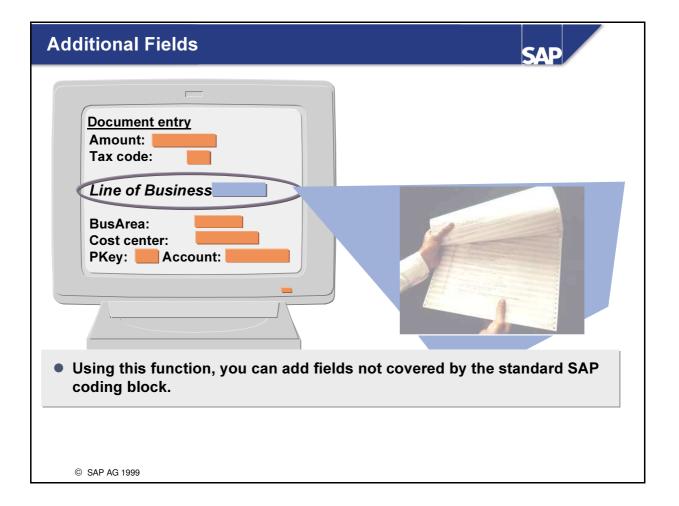


- As a step in the implementation process, management reports are evaluated and compared with reports in the SAP system. For reports that are non-standard, it is necessary to determine what the key structure of the reporting table will be and which characteristics and key figures will be included.
- Moreover, there is a field (characteristic) required by management called 'Line of Business' which is used to give an additional Business Line breakdown perspective to certain financial reports. This field (characteristic) must be created as it has not been delivered by SAP.

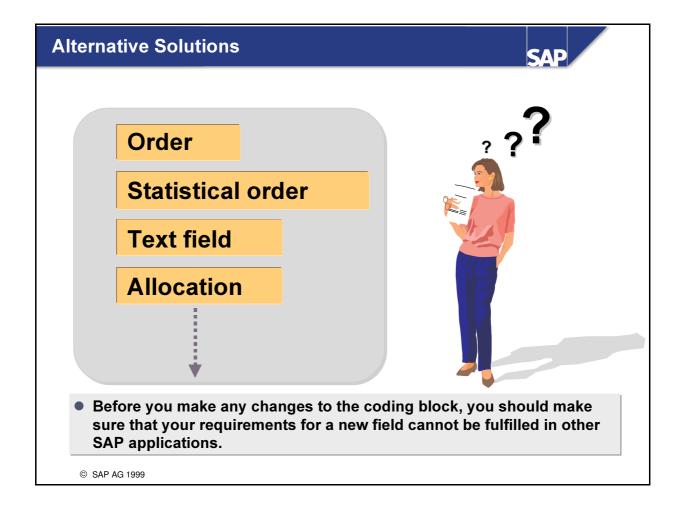




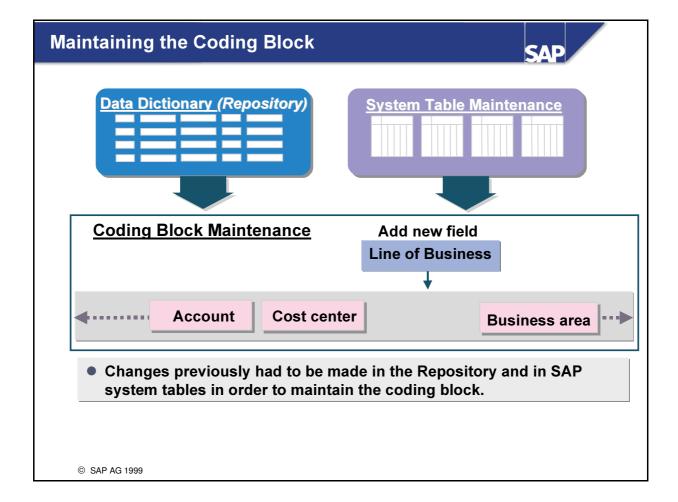
- The account assignment block, also called the coding block, is a standard component delivered with the SAP System. The user does not usually come into direct contact with the coding block.
- The transactions and components within the SAP System depend on the coding block. The coding block defines all fields used in a transaction or function.



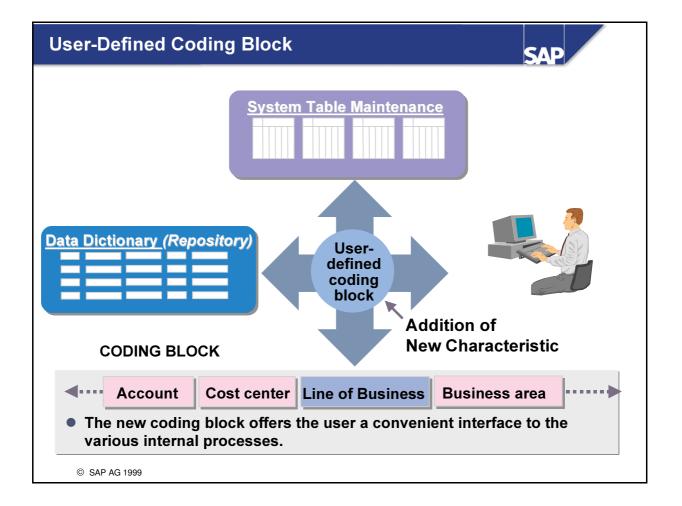
- In the standard SAP System, there are many predefined fields that can be used for various functions. In most cases, the user does not need to define new fields.
- In cases in which a new field is required, the user can add this field to the coding block.
- The above example shows the necessity of adding the field Line of Business to the G/L document entry function.



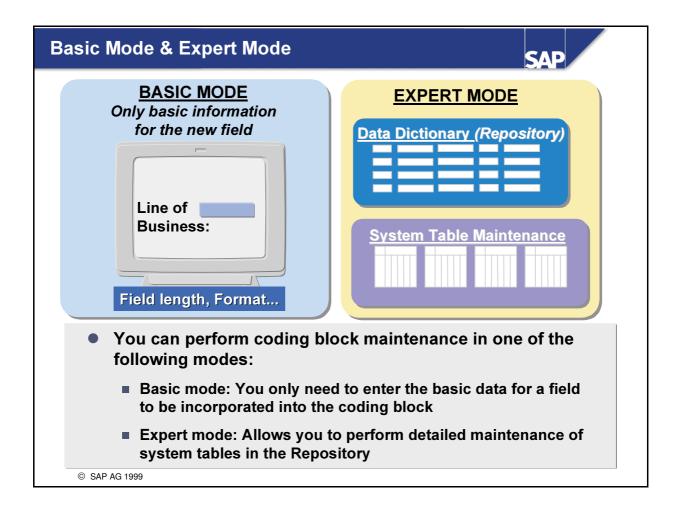
- There are many fields in the standard system that may fulfill your requirements.
- Before you decide to change the coding block, you should make sure that there is not another solution in the standard system that would satisfy your requirements.
- If you do not find an alternative solution, you should carefully consider how you want to use your new field.



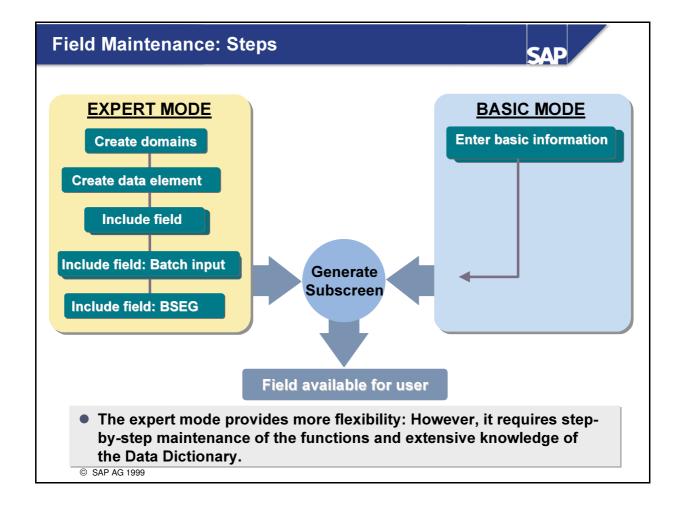
- Previously it was problematic to change the coding block in order to add a new field to it.
- You had to have extensive knowledge of how to maintain the Data Dictionary (Repository) and system tables.
- The new coding block maintenance transaction is a user-friendly tool.
- Client-independent objects are maintained when you use this function. This means that any changes made to these objects affect all clients in the system.
- The new field is a permanent addition to the coding block.



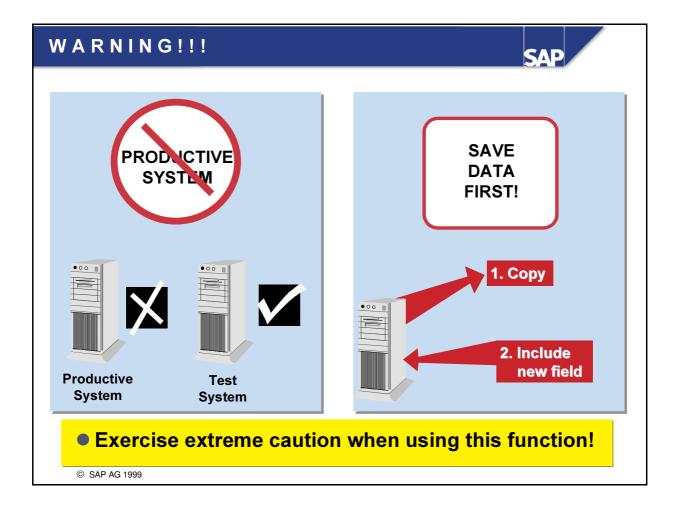
- Using this new transaction, you can add your own field to the coding block without having special knowledge of the Data Dictionary or system table maintenance.
- The following functions are available:
- Definition of a new account assignment field with or without a check table.
- Enhancements to database tables (BSEG, COEP, MSEG) to include a new field and add entries in the appropriated system control tables.
- Definition of subscreens that contain your new field.
- The new account assignment fields can be used in FI General Ledger, MM Purchasing, MM Invoice Verification and in MM Inventory Management. You can, of course, also use these fields in FI-SL. If you define appropriate field movements, this information can be transferred to the FI-SL database.
- You can define up to 18 additional account assignment fields.



- The "Expert Mode" is designed for users that have extensive knowledge of the Data Dictionary.
- Since the entire Dictionary functionality is available with all processing options, there are risks involved in using the "Expert Mode".
- In the "Expert Mode", you can make STEP-BY-STEP changes, that are carried out in the background in the "Basic Mode" This allows you to define additional parameters that would otherwise be defined by the system.
- The "Basic Mode" is designed for users who have only limited knowledge or no knowledge of the Data Dictionary. In the "Basic Mode", you only need to make the following entries:
  - Field name, field description, data type (CHAR or NUMC) and field length.
- (Note: Check tables can only be added in the "Expert Mode".)



- In the "Expert Mode", you must carry out the following steps:
  - Create domains: Technical information such as length, field type, and so on (If required, you can enter fixed values for these domains or you can specify a check table)
  - **Create data element:** Conceptual description of a field (For example, account number, account type, and so on)
  - Include field in the customizing include CI\_COBOL for the coding block-relevant tables and in CI\_COBOL\_BI to use the field when entering an FI document in background processing
  - Insert at the end of table BSEG for FI G/L account postings.
- In the "Basic Mode", you only need to enter the general field information, for example, name, description, field type, and so on.
- In the last step of the "Expert Mode", you must generate a subscreen that contains the new field. The system automatically performs this step in the 'Basic Mode'.



- The new fields are added to existing tables in the Data Dictionary. These changes are extremely critical and can lead to a loss of data if not carried out properly.

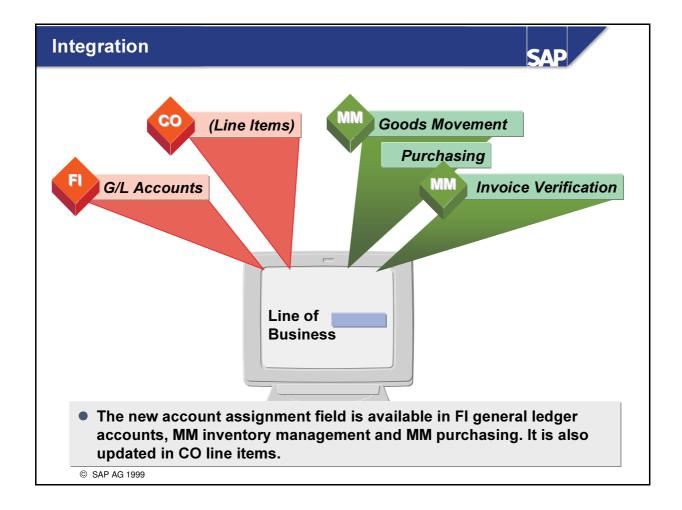
  It is therefore highly recommended that you save your data before performing this function.
- When you add a new field, you do not need to convert any database tables. It is not possible to make all changes that require a conversion (for example, making subsequent changes to the format of an existing field or deleting a field) using the standard functions. Such changes may lead to a loss of data.
- Any changes you make are effective throughout the entire SAP system. To use this function, you need your own test system. As soon as a client is marked as 'productive' in table T000, this function is blocked for the entire system.
- To perform this function, you need the following authorizations:

• X\_COBL\_MOD: for adding fields to the coding block

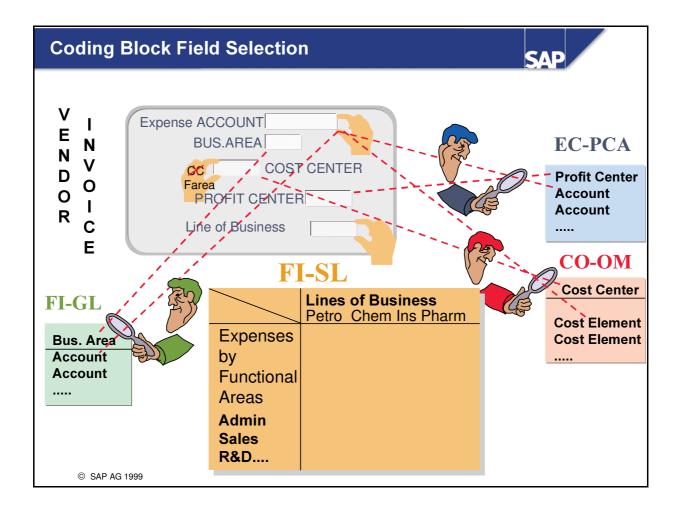
• **S\_TABU\_CLI:** for maintaining client-independent tables

• S **DEVELOP:** for maintaining the Data Dictionary

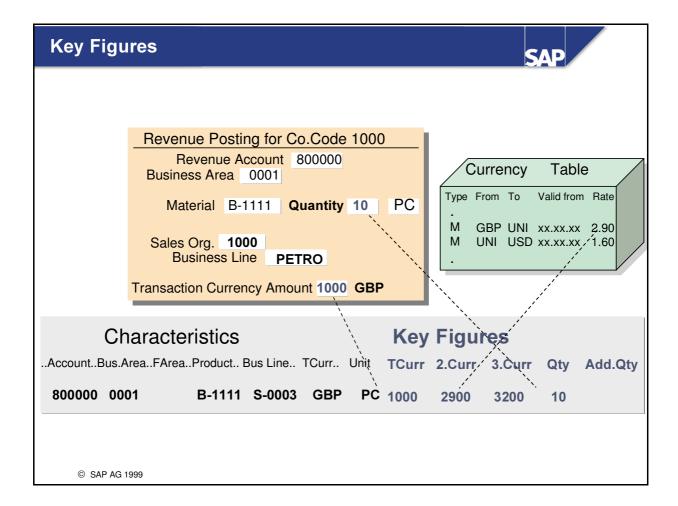
• **S\_TRANSPRT:** for transporting



- The new field can be used by the following SAP modules:
  - **FI:** G/L account postings
  - CO: The account assignment field is transferred to CO via the FI document line
  - MM: Purchasing, Inventory Management, Invoice Verification
- If the field is also added to FI-SL tables, the entire FI-SL functionality is available for that field. This functionality includes:
  - FI-SL direct posting
  - Planning
  - Allocations
  - Rollups
  - Balance Carry Forward
  - Reporting



- Coding Block Field Selection
- An important advantage of FI-SL resides in the capability of managing multiple account assignments and structures. With every posting in a highly integrated system quite a deal of additional assignments are included in most business activities. A large proportion of these assignments are intended to meet the demands of special application areas, for example general ledger and overhead controlling which take over only the relevant information required.
- Controlling requires information relating to the controlling area, the cost objects involved and the cost element. The General Ledger needs information pertaining to the general ledger account.
- The FI-SL System is able to extract out of the coding block any number of the characteristics made available in a posting, in order to update these combinations and provide the relationships and level of detail needed. These may well go beyond the specific requirements of the other application areas.



- For the combination(s) of characteristics selected, the FI-SL system stores the balances in the following key figures:
  - Transaction Currency; the currency of the document
  - A 2nd and 3rd Currency depending on the currencies selected for the ledgers (company code, company, controlling area, group).
  - · Quantity and additional quantity

## **Characteristics And Key Figures: Summary**





- In this unit you were shown the process of including new fields (characteristics) in the SAP coding block
- In addition, the basic key figures for balances (amounts and quantities) were described

## **Exercises**





## Unit: Characteristics and Key Figures

**Topic: Characteristics and Key Figures** 

At the conclusion of this exercise, you will be able to:

- form the basis of 2 concrete report requirements listing the characteristics and key figures required as well as investigating their inclusion in either the SAP Coding Block or the Coding Block Customer Include
- Create a new field in the Coding Block and name the steps required



As a step in the implementation process, management reports are evaluated and compared with reports in the SAP system. For reports that are non-standard, it is necessary to determine what the key structure of the reporting table will be and which characteristics and key figures will be included.

Moreover, there is a field (characteristic) required by management called 'Line of Business (ZZLOB) which is used to give an additional breakdown by industry sector perspective to certain financial reports. This field (characteristic) must be created as it has not been delivered by SAP.

- 1-1 Study the 2 following reports. Then list the characteristics and key figures needed for them
  - 1-1-1 After that, you should investigate whether the characteristics required are already included in the SAP delivered Coding Block or in the Coding Block Customer maintenance

1 : Company Code: 1000 Bus	.Areas 0001-0003 Fiscal Year: 2	0XX Periods: 1-12 Ve	ersion 1
	Local Currency Actual	Local Currency Plan	Variance
Direct Labor Costs			
Salaries			
Overtime Costs ADMINISTRATION			
Direct Labor Costs			
Salaries			
Overtime Costs			
SALES			
Direct Labor Costs			
Salaries			
O viting Court			

R&D TOTAL FUNCTIONAL AREAS

2: Company Code:1000 Bus.Areas:0001-0003 Fiscal Year:20XX Periods:1-12 Version 1

## Trans.Curr.Local Curr.GroupCurr.Local Curr.Variance GroupCurr.GroupCurr.Variance Actual Actual Actual Plan Actual Plan

Revenue Acct.A Revenue Acct.B Revenue Acct.C Material X Revenue Acct.A Revenue Acct.B Revenue Acct.C Material Y MATERIALS XY **PETROLEUM** Revenue Acct.A Revenue Acct.B Revenue Acct. MATERIALS XY **CHEMICALS** COMMUNICATION PHARMACEUTICAL ALL LINES OF BUSINESS

1-1-2 List the characteristics and key figures required for the above reports:

REPORT 1		RI	EPORT 2
Characteristics:	Key Figures:	Characteristics:	Key Figures:
<del></del>			
<del></del>			
<del></del>			

1-1-3 Menu path to reach the Coding Block functionality in FI-SL:

 $SAP\ Easy\ Access 
ightarrow Activity\ Group\ SL: Reporting\_Analyst 
ightarrow IMG 
ightarrow Customizing\ edit\ project.$ 

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Maintain Coding Block

Study the SAP Standard Coding Block (Standard Account Assignment) and then the Coding Block Customer Include Structure (CI\_COBL) and list for each, the characteristics from the above you have named which are contained in them:

Customer Include Structure	
Field name Description	

1-2 Create a new field (Land Code) in the Light Mode:

(→Maintain Coding Block→Add Fields)

Field name: **ZZXXLCODE** 

Field description: Land Code

Data type: CHAR

Field length: 4

Development class: **Z**\*\*\* Ask Instructor

IMPORTANT: Choose TEST RUN (x) and Execute.

Read the log.



Please only execute as a T E S T run!

## **Solutions**



**Unit: Characteristics and Key Figures** 

**Topic: Characteristics and Key Figures** 

1-1 Consider the obvious characteristics presented in the reports by reviewing the text items in the rows and columns. Read the text headers for further clues. For each characteristic, take in account what other characteristics may be associated, for example, if your report requires *Period*, then *Year* must also be included.



1-1-1You should investigate whether the characteristics required are already included in the SAP delivered Coding Block or in the Coding Block Customer Include (1-1-2).

1-1-1 The characteristics and key figures required for the 2 reports. Save this list to be used later when considering other aspects of Special Ledger:

REPORT 1	REPORT 2
Characteristics: Key Figures:	Characteristics: Key Figures:
Account number Local Curr.(2.Curr.)	Account number
Functional area	Material (Product) Local Currency (2.Curr)
*Company code	Line of Business Group Currency (3.Curr.)
Business area	*Company Code
*Year	Business area
*Period	*Year
*Record Type (actual/plan)	*Period
*Version	*Record Type (actual/plan)
	*Version
* these are required fields	
	* these are required fields

1-1-2 Menu path to reach the Coding Block functionality in FI-SL:

SAP Easy Access—Activity Group SL:Reporting Analyst—IMG—Customizing Edit Project

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Maintain Coding Block.

Review the coding block (Standard Account Assignment) as well as the Customer Include Structure (CI\_COBL). The characteristics you find are defined as the variable characteristics as Special Ledger has required characteristics that are not listed. These include Ledger, Version, Record Type, Company Code, Year and Period

Standard Account Assignment	Customer Include Structure
Field name Description	Field name Description
FKBER Functional Area	ZZLOB Line of Business
GSBER Business Area	
MATNR Material	

1-2 Create a new field (Land Code) in the Light Mode:

(→Maintain Coding Block→Add Field)

Field name: **ZZXXLCODE** 

Field description: Land Code

Data type: **CHAR** 

Field length: 4

Development class: **Z**\*\*\* (Inquire Instructor)

Choose Test run (x) and Execute.

Read the log.



Please only execute as a T E S T run!

#### Resulting protocol:

Log for field ZZXXLCODE

BB112 W Test run

BB113 S Data element ZZXXLCODE has been created

BB105 S Entry TCOBM: ZZXXLCODE 134

BB105 S Entry *TCOBF*: 112ZZXXLCODE X

BB105 S Entry TMODO: SKB1-FAUS1 1122KONT

BB105 S Entry TMODP: ESKB1-FAUS1 112Land Code

BB105 S Entry *TMODU*: SKB1-FAUS1 112BSEG ZZXXLC

FB200 S Report SAPF120 was generated

BB149 S Generation report SAPFACCG executed

BB146 S Generation program RFBIBLG0 for FI batch input executed

BB148 S Generation report RFBIPPG0 for parked FI documents

BB105 S Entry *GB01*: **009SBSEG ZZXXLCODE** 

BB105 S Entry *GB01*: **001SCOBL ZZXXLCODE** 

BB147 S Generating report RGUGBR00 for validations/substitutions executed

BB105 S Entry *TMODO*: T156B-FAUSW1122KONT

BB105 S Entry *TMODP*: ET156B-FAUSW112Land Code

BB105 S Entry *T162X*: **401E2112Land Code** 

BB054 S Subscreen 9999 has been generated

## **Defining the Table Requirements**



- New Characteristic in FI-SL Tables
- FI-SL Table Group
- Grouping Characteristics in Tables
- Number of Database Records
- Summary and Line Item Tables
- Table Group Definition
- Performance Considerations: The Use of Indices
- Installation in FI-SL

## **Defining the Table Requirements: Objectives**





At the completion of this unit, you will

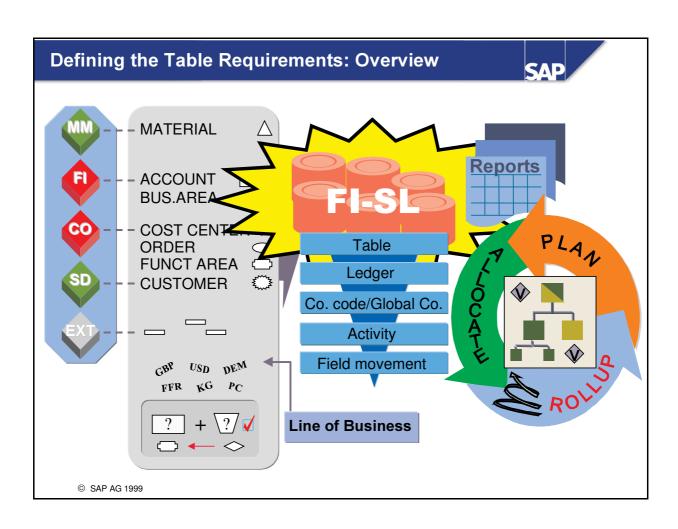
- be familiar with the FI-SL summary and line item tables
- know how to create an FI-SL table group in the SAP Repository and how to install the table group in FI-SL

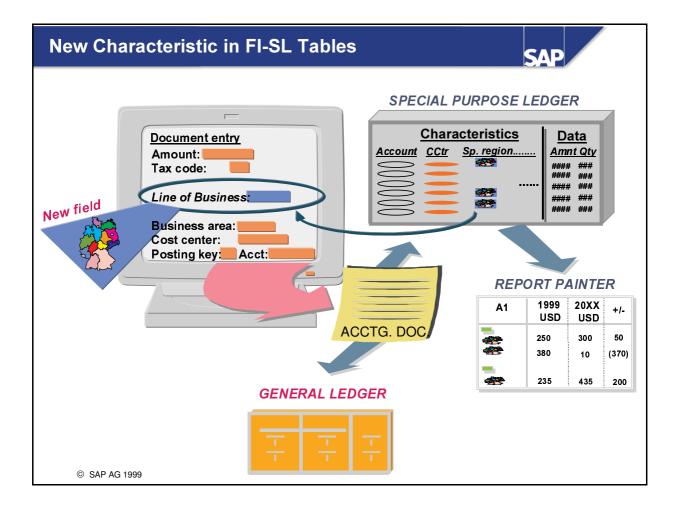
## Defining the Table Requirements: Business Scenario



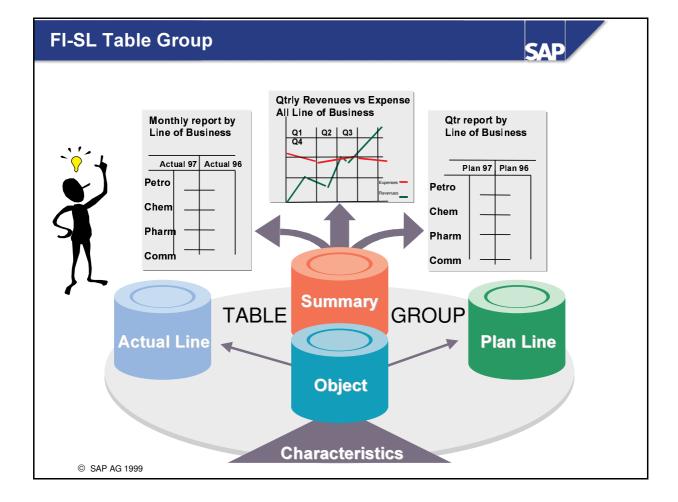


 After the characteristics and key figures have been sorted logically into groups that will support our required reports, reporting database tables must be generated and installed for the various FI-SL components before they can be made available for update and reporting.



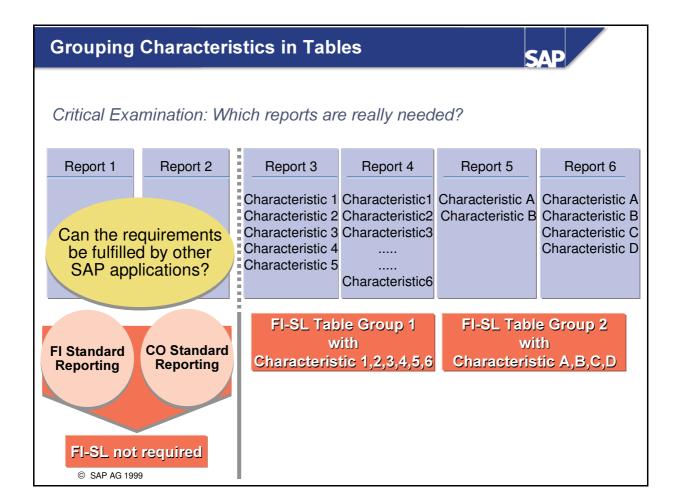


- You can transport the new characteristics added to the coding block from the accounting document to FI-SL using an appropriate field movement.
- If you want to process a new characteristic using FI-SL functions, you must first insert the characteristic in new FI-SL tables.
- In this unit, you will learn how to define and install these tables.



- The data you send to FI-SL is stored in a group of tables. These are the following:
  - **Object Table 1:** This table stores the characteristics you need and also an object number for these characteristics as receiver and sender (example receiver account RACCT and partner SACCT).
  - **Object Table 2:** This is optional and contains characteristics which are (fixed) transaction attributes and have no receiver/sender relationship (example Controlling area KOKRS). For these transaction attributes an object number is also stored.

    These Object numbers determine how the summary and line item tables will be accessed via the
    - These Object numbers determine how the summary and line item tables will be accessed via the object tables.
  - Summary Table: This table stores the actual and plan total balances.
  - Line Item Tables: These tables store the document information (actual/plan) for the totals stored in the Summary Table.



- An implementation of FI-SL is recommended only if your special reporting requirements cannot be covered by the standard SAP applications.
- Once you have decided to use FI-SL, you should analyze the characteristics you need to use and combine together for reports. By grouping together dimensions in different table groups, you can improve system performance and save storage space.

### **Number of Database Records**



#### Two possible scenarios:

Characteristics required for reports:

Characteristic 1: 10 Entries

Characteristic 2: 20 Entries

Characteristic 3: 10 Entries

Characteristic 4: 10 Entries

Characteristic A: 10 Entries

Characteristic B: 20 Entries

Characteristic C: 20 Entries

All characteristics in a table group

Table group:

10\*20\*10\*10\*10\*20\*20 =

80 million records

Characteristics 1,2,3,4 in table group 1:

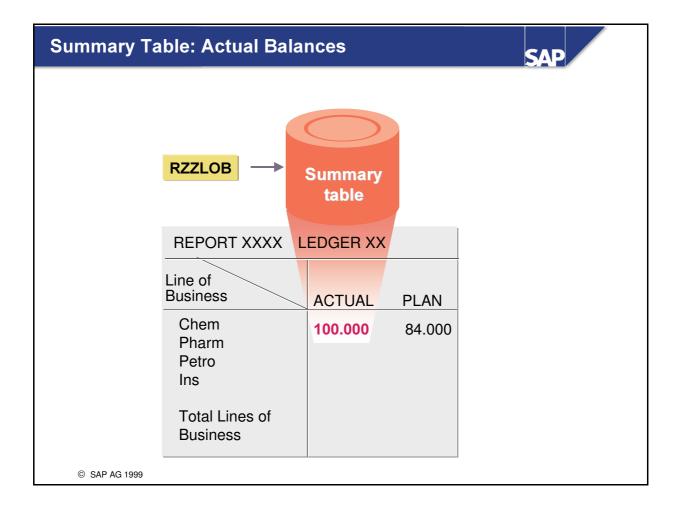
10\*20\*10\*10 = 20000 records

Characteristics A, B and C in

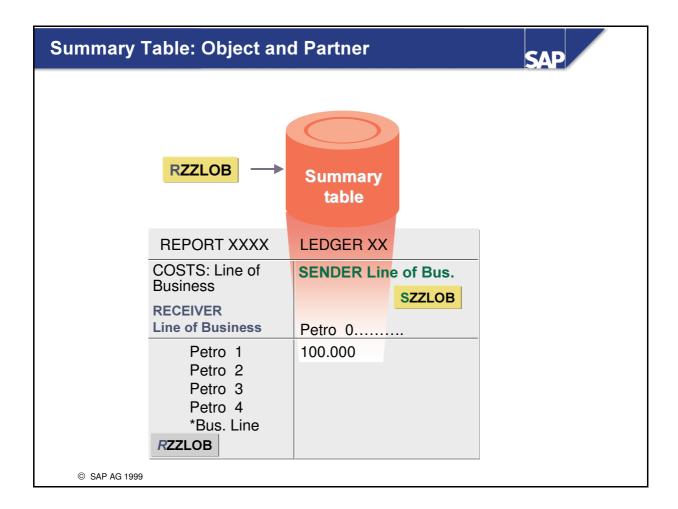
table group 2:

10\*20\*20 = 4000 records

- From a performance point of view, the read time could take longer (especially for periodic processing and also in reporting) if you have a large number of data records.
- It is therefore advantageous to use several table groups.

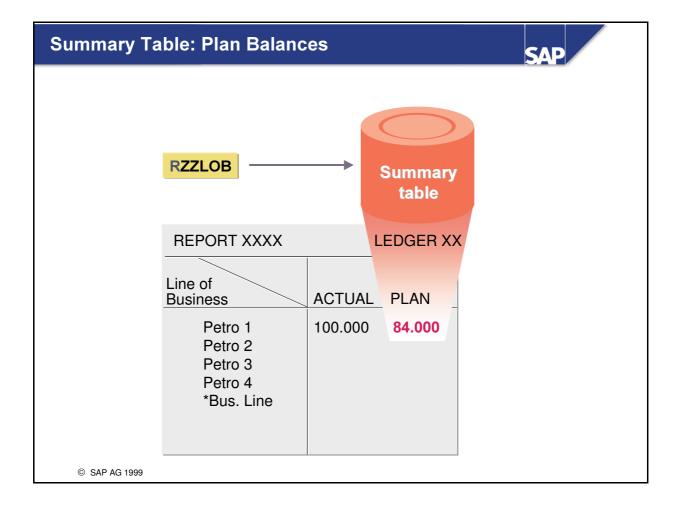


■ Summary records for accounting transactions that are entered in the FI-SL system are updated in the summary table. The data is totaled per period.

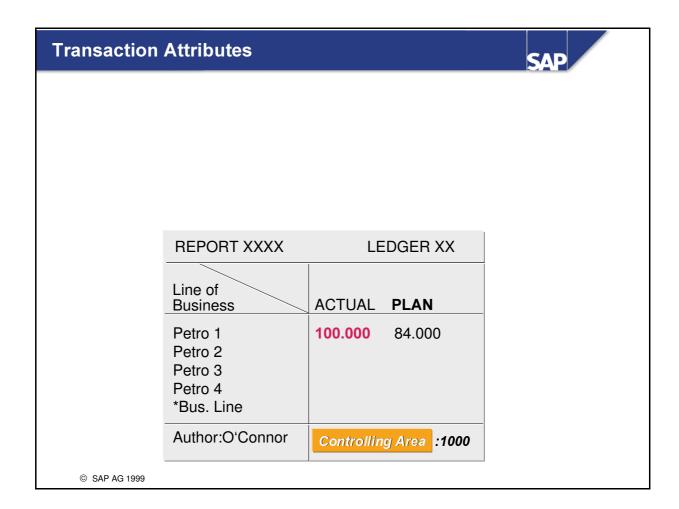


#### ■ The summary table contains:

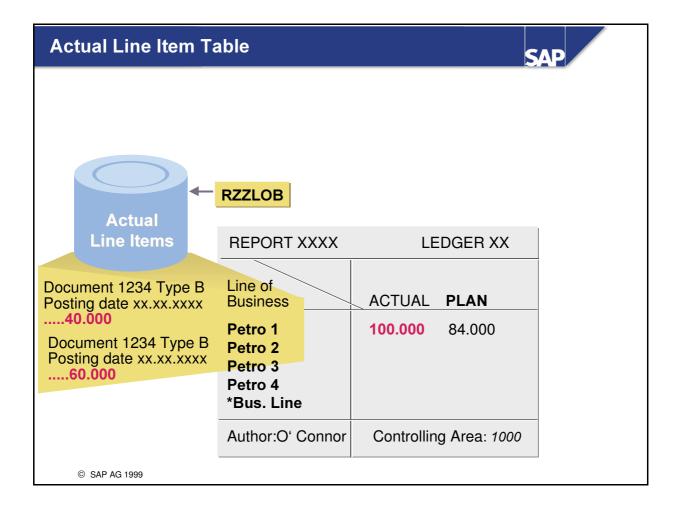
- fixed fields that you cannot change in the key part, for example, client, ledger, record type, version, fiscal year, currency key, etc.
- variable fields (characteristics) in the data part, for example, ZZlob as the object (RZZlob) and ZZlob as the partner (SZZlob)



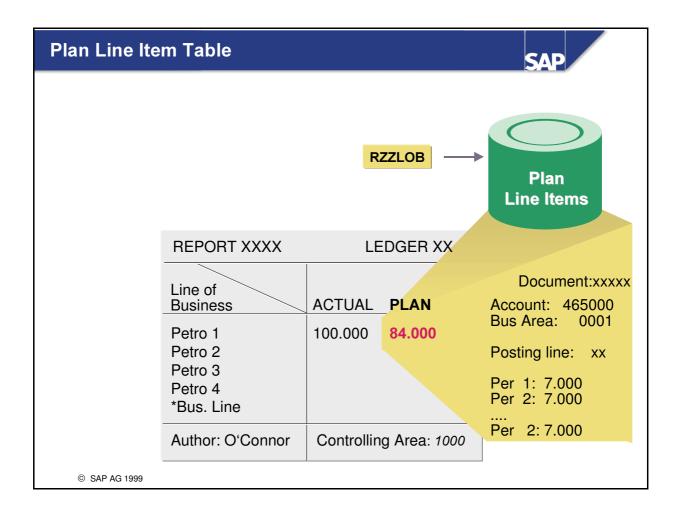
■ The Plan summary balances are stored along with the actual summary balances and are differentiated by the record type 1 (Plan).



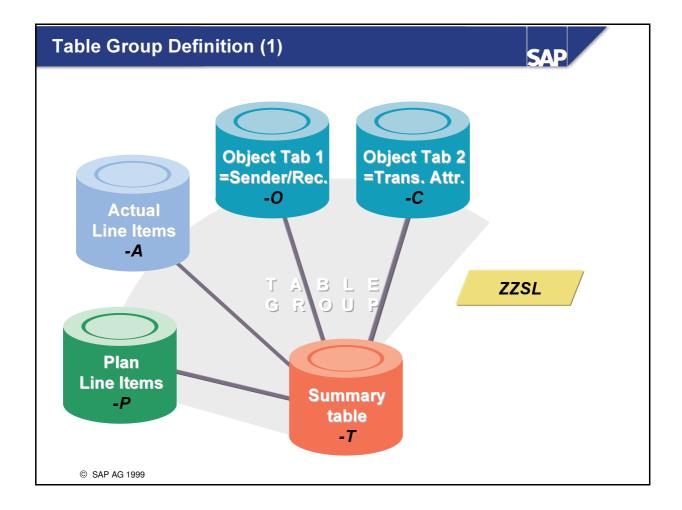
- Some variable characteristics are transaction attributes and do NOT have a sender / receiver relationship, for example, controlling area, activity, transaction type.
- These fields will NOT be used for allocations.



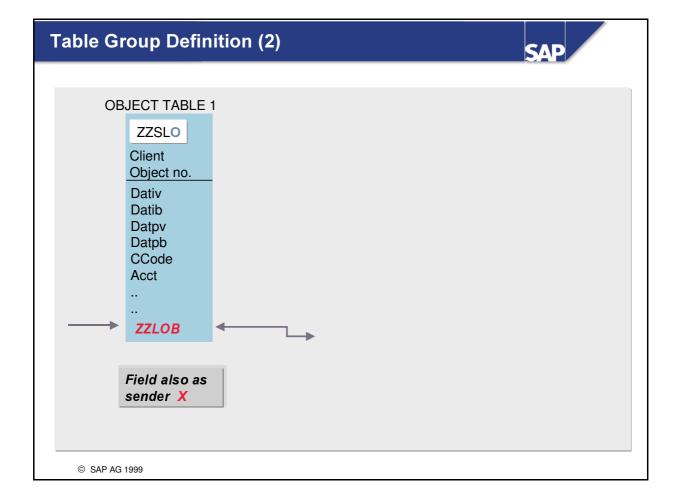
■ The document lines of the accounting transactions entered in FI-SL are stored as line items in the FI-SL actual line item table.



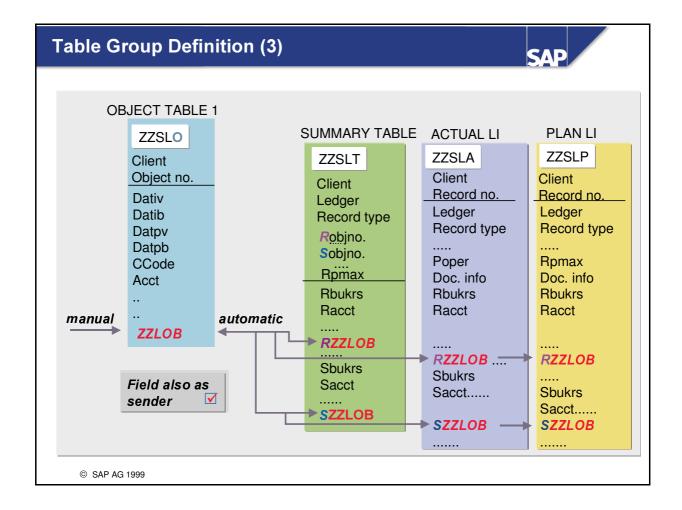
■ The planning changes you make are stored in the FI-SL plan line item table.



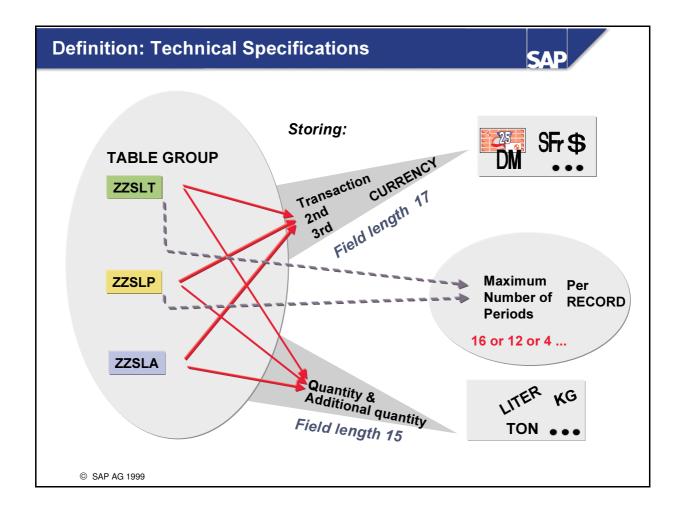
- Using the "Define table group" function, you can create a complete table group.
- You can define the variable characteristics for two object tables.
- The system automatically generates the tables (summary table, actual line item table, and plan line item table) assigned to these object tables.



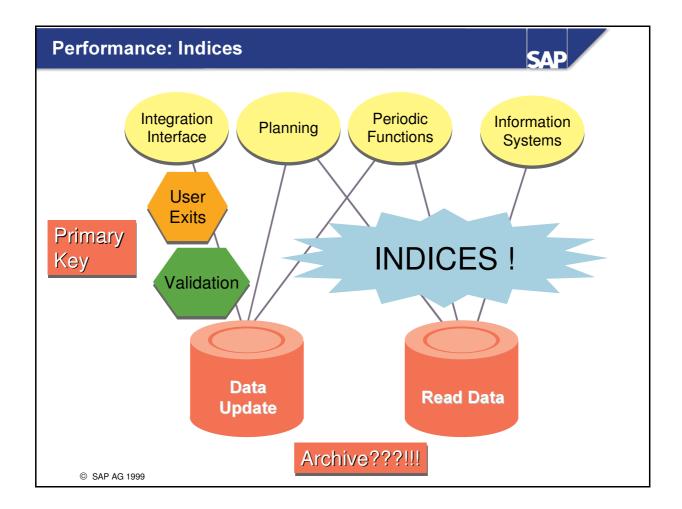
- The "Define table group" function avoids redundant maintenance of object tables and their dependent tables. Only the object table 1 (and object table 2, if required) is maintained.
- You can specify if a sender characteristic is required for a characteristic in object table 1, the summary table, actual line item table and plan line item table. You should use sender characteristics if you want to save the sender information for an assessment or distribution in an allocation. For example, if you want to execute a distribution between cost centers, you can save the sender cost center in the data record.



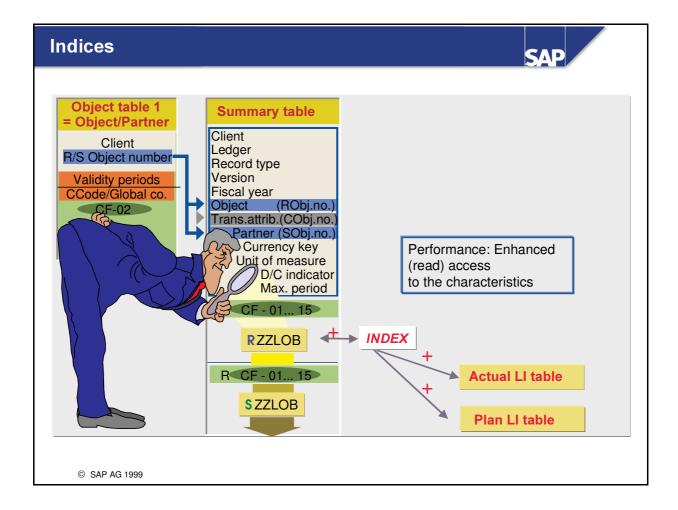
■ Important information for summary tables and line item tables is derived from the object table.



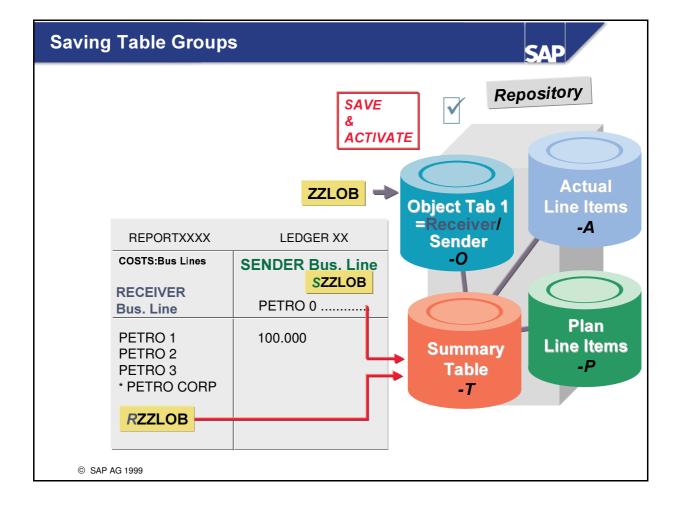
- Using the "Extras → Technical characteristics" function, you define the currencies and quantities required in your ledger. To save storage space, you should deselect all of the currencies and quantities that you do not want to use.
- In the "Maximum number of periods" field, enter the maximum number of period fields per record. The default value is 16 periods (12 periods + 4 special periods). If you want to store the data on a quarterly basis, for example, enter a '4', or on a 12 period basis without special periods, enter a '12'.
- In the "Field length" field, you determine the length of the currency and quantity fields depending on the anticipated length of the amounts to be entered. You can enter field lengths 15 and 17. You should check the length of the maximum amount and quantity and define the respective fields accordingly. If you use smaller field lengths, you will once again save storage space.



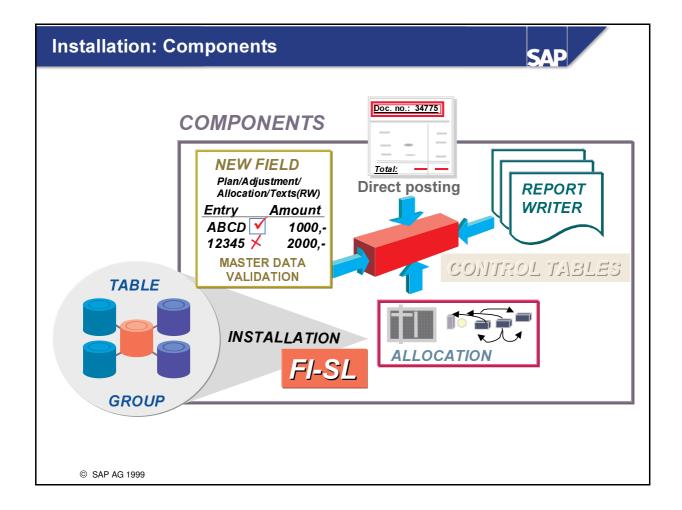
- Indices are a decisive factor for improving system performance.
- The secondary indices play an important role in all FI-SL applications.
- General information on indices:
  - The index should contain the fields that are often used to select data. In the FI-SL summary tables, the dimensions Account and Cost Center are the fields most often used to select data. User-defined fields, such as product number, order or functional area, can also be used to make very specific selections.
  - The fields that are used most often to select data should be placed at the beginning of the index. It is advisable to define several indices with few fields instead of one index with many different fields. You can define up to four and five indices.



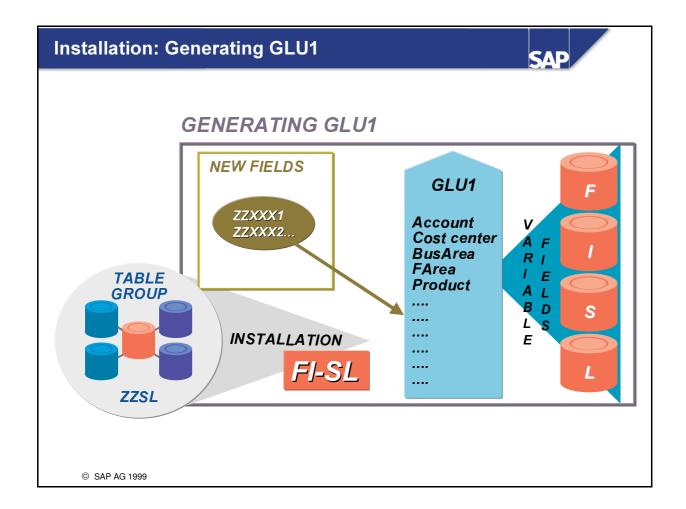
- Defining indices for your tables is very important for future system performance.
- For information on indices please refer to OSS Note 31374 "FI SL: Secondary indices for transparent tables".
- You should create indices for your summary tables. If you want to create line item reports, you should also define indices for the line item tables.
- The ABAP Report RGUIST00 will help you to find an optimal index for SL Tables. Try running it for GLFUNCT or your own tables after it (they) have been updated after a certain time. This program will list the most selective fields.



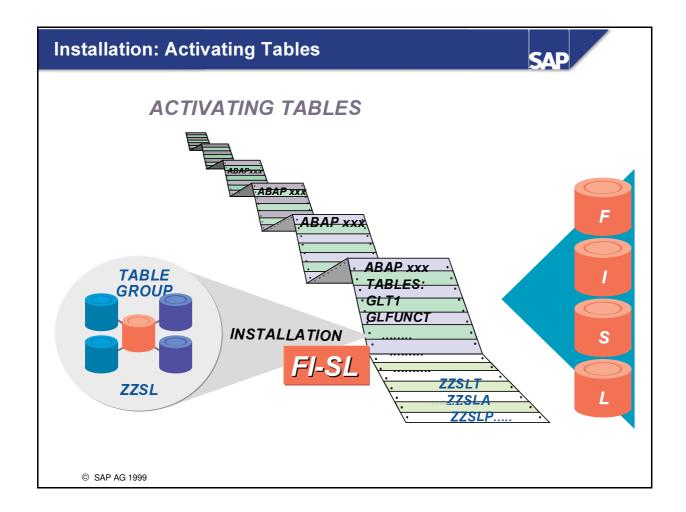
- When you save your table group, the system automatically performs a consistency check of the tables in your table group.
- After your table group has been checked and saved, you can request that the system activate the tables in your table group.
- Once you have created your tables, you can install the table group.



- You must first determine the components for which you want to install your tables. For these components, control entries are generated for your tables. The components are:
  - **Direct posting:** Using these entries, data can be posted to your new table.
  - Master data: Using these entries, master data validation is activated for your new table.
  - Allocation: Using these entries, you can work with allocations for your new table.
  - Report Writer: Using these entries, you can work with the Report Writer for the new table.



■ If you select this option, the internal structure GLU1 is generated in the Data Dictionary. This is important if you want to install an FI-SL table that contains fields which have not yet been defined in any other FI-SL table.



■ If you select this option, the FI-SL code is regenerated according to the current system settings. This is particularly important when installing a new table because the standard FI-SL programs must be converted so that they can work with the new table.

## SIMPLY PUT: Create a Special Ledger Table



To create a new Table Group in Special Ledgers:

- 1. Name the table. Start your name with a leading "ZZ"
- 2. Select either "Local" or "Global" option.
  - 3. Remove any unnecessary fields







- 5. (opt) Any fields that will not be used in Allocations, add to Object 2 table
- 6. Verify Technical Settings, including # of currencies, quantities and periods
  - 7. Check and save! Answer Yes to Activate and Install in database.
  - 8. Press Install and enter past Check Secondary Indices Warning.
  - 9.Enter to Install SL components, update GLU1 and programs
  - 10. Name the 'ZZ' drilldown program to actual line item table



When you receive a message of completion, you're finished!

## Defining the Table Requirements: Summary





- You have been made familiar with the various components of FI-SL tables.
- You have also learned how to define and install table groups in Special Purpose Ledger.

## **Exercises**



## Unit: Defining the Table Requirements

**Topic: Table Group Definition and Installation** 



At the conclusion of this exercise, you will be able to:

- Study an existing table group GLFUNC
- Define a new table group in the Repository
- Install the new table group in FI-SL
- Check the table group prior to assignments



After the characteristics and key figures have been sorted logically into groups that will support our required reports, reporting database tables must be generated and installed for the various FI-SL components before they can be made available for update and reporting.

1-1 Study the table group GLFUNC with the help of a graphical view.

Menu path:

SAP Easy Access—Activity Group SL:Reporting\_Analyst—IMG—Customizing Edit Project

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Tables  $\rightarrow$  Display Assignments Graphically

FI-SL table: GLFUNCT

Display the fields and indices for both Object tables, the Summary table and both Line item tables (actual and plan)

1-2 Define a new table group in the Repository

Menu path:

SAP Easy Access—Activity Group SL:Reporting\_Analyst—IMG—Customizing Edit Project

SAP Reference IMG o Financial Accounting o Special Purpose Ledger o Basic Settings o Tables o Definition o Define Table Group

*Table Group:* **ZxxTAB** (xx = Group Number)

Create.

*Table group type:* Local table group (company code)

Continue.

Read the notes prior to continuing processing of the table group.

Continue.

- 1-2-1 Starting with the Object 1 table, the field CNTR is to be removed. Following the field FAREA, you should insert the fields ZZLOB which is to use the data element ZZLOB and MATNR which is to use the data element MATNR.
- 1-2-2 These 2 new fields should also be used as Senders.
- 1-2-3 Subsequent to this, you should go to Object table 2 and add the field RMVCT which uses the data element RMVCT.
- 1-2-4 Check the summary and line item tables and check the existence of the Receiver and Sender fields and also the fixed attributes.
- 1-2-5 Since your table group should not include additional quantities, leave the indicator 'Store add quantity' unmarked and then go back and check your tables to see whether the field group has been removed.
- 1-2-6 Now check your Table Group.
- 1-2-7 Save the table group . Enter the Development Class  $\mathbf{Z}^{***}$  (ask instructor) and save.

Create a request with a short description 'Table Group ZZxxTAB' and save. Continue.

You will then get a message 'Activate tables and indices and create them on the database.'

Accept this.



## **DO NOT INSTALL** your table groups!!

Your instructor has activated one and stored it on the database. We shall install this one table group in FI-SL and use it for our different ledger assignments later!

#### 1-3 Table Group Installation

1-3-1 Call up once again a graphical view of a table group, this time for the one which has been installed.

#### Menu path:

SAP Easy Access—Activity Group
SL:Reporting Analyst—IMG—Customizing Edit Project

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Tables  $\rightarrow$  Display Assignments Graphically

FI-SL table: **ZZSLT** 

Display the fields and indices for both Object tables, the Summary table and both Line item tables (actual and plan)

1-3-2 Check the existence of the Summary table ZZSLT, the Actual line table ZZSLA and the Plan line table in the FI-SL table directory

#### Menu path:

SAP Easy Access → Activity Group
SL:Reporting Analyst → IMG → Customizing Edit Project

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Maintain Table Directory

Position on Z

1-3-3 Check to see if the fields RZZLOB, SZZLOB, RMATNR and SMATNR are contained in the structure GLU1:

#### Menu path:

SAP Easy Access -> Activity Group SL:Reporting\_Analyst -> Tools -> ABAP Workbench -> Button: Dictionary

 $Tools \rightarrow ABAP Workbench \rightarrow Button: Dictionary$ 

Enter Object name **GLU1** and display the table.

Use the binocular symbol to help you to find these 4 fields.



**Unit: Defining the Table Requirements** 

**Topic: Table Group Definition and Installation** 

1-1 Graphical view of the FI-SL table GLFUNCT. See exercise.

#### Menu path:

SAP Easy Access—Activity Group SL:Reporting\_Analyst—IMG—Customizing Edit Project

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Tables  $\rightarrow$  Display Assignments Graphically

1-2 Before building any tables in Special Ledgers, have all of the Field names and Data Elements you will require.

As a SAP naming convention, the name of the table group must begin with 'Y' or Z'.

#### Menu path:

SAP Easy Access—Activity Group SL:Reporting\_Analyst—IMG—Customizing Edit Project

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Tables  $\rightarrow$  Definition  $\rightarrow$  Define Table Group

*Table Group:*  $\mathbf{ZxxTAB}$  (xx = Group Number)

Create.

Table group type: Local table group (company code)

Continue.

Review the notes for processing a Table Group. Take note that 5 tables are about to be created for Special Ledgers

Continue.

1-2-1 & 1-2-2 Table name: **ZxxTABO**: Object table 1

Field name Data element Key Sender

MANDT MANDT x

OBJNR GOBJNR x

BUKRS BUKRS x

ACCT RACCT x

BUSA GSBER x

FAREA FKBER

ZZLOB ZZLOB  $x \ll Add \text{ in step}(1-2-2)$ 

MATNR  $x \ll Add in step (1-2-2)$ 

1-2-3 Object table 2

Table name: **ZxxTABC**: Object table 2

Field name Data element Key

MANDT MANDT x

OBJNR GOBNR x

LOGSYS LOGSYS

RMVCT RMVCT <<< Add

- 1-2-4 By adding the fields to the Object 1 table and selecting 'S' for Sender, both the Sender and Receiver versions of the fields have been created..
- 1-2-5 Technical Characteristics

::

Quantities

X Store add. Quantity << Remove X

1-2-6 Check table group

Resulting table check protocol: **JUST information** 

Check secondary index '1' of table ZxxTABT

Check secondary index '1' of table ZxxTABA

Check secondary index '1' of table ZxxTABP

1-2-7 Save your table group and activate on the database. Your Instructor should provide a development class

#### 1-3 Table Group Installation

1-3-1 Review the table group that has been installed by your instructor ZZSLT. This is the Summary table of the table group ZZSL.

Menu path:

SAP Easy Access—Activity Group SL:Reporting Analyst—IMG—Customizing Edit Project

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Tables  $\rightarrow$  Display Assignments Graphically

FI-SL table: **ZZSLT** 

Display the fields and indices for both Object tables, the Summary table and both Line item tables (actual and plan) <<< Double click on each of the tables. While reviewing the structure of each table, locate the key figures on each table as well as the period field. Note the differences in structure of the Summary table (ZZSLT) and the Actual and Plan Line Item Tables (ZZSLA and ZZSLP)

1-3-2 Using the Black pointers on the tool bar, review the settings on each table list. Technical settings made during table definition are reflected here.

Menu path:

SAP Easy Access — Activity Group SL:Reporting Analyst—IMG—Customizing Edit Project

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Maintain Table Directory

Position on Z..

1-3-3 GLU1 is updated with new fields when the Table Group is installed as one of the steps in installation.

#### Menu path:

SAP Easy Access—Activity Group SL:Reporting\_Analyst—Tools—ABAP Workbench—Button:Dictionary

#### Tools $\rightarrow$ ABAP Workbench $\rightarrow$ Button: Dictionary

The GLU1 is a Structure in the Data Dictionary and does not store any data itself. Note that the menu path **Utilities** —**Table Contents** is not available. The data of Special Ledger is stored in the Table Group

The internal structure GLU1 contains all fields (dimensions) that are used in the Special Purpose Ledger system (FI-SL). Before the generation, you can display a list containing all dimensions that the GLU1 structure would contain after the generation.

Beginning with Release 3.0C, you can generate program RGRGENSI to display actual line items for the summary data stored in your own summary database table.

If you have already adapted RGUGLS10, it is recommended that you create a new line item report using program RGRGENSI, since the new line item report contains additional functions.

Your system is also delivered with an ABAP program called RGBSIS01 for the summary table GLT0 (G/L account transaction figures). This program displays line items from table BSIS (table BSIS is a view of table BSEG).

### **Setting up the FI-SL Environment**



- Transferring Data to and Organizing Data in Special Purpose Ledger
- FI-SL Master Data Overview
- FI-SL Update Example
- Parallel Ledger Update
- Ledger Master Data
- Configuring the Ledger
- Assignment of Company Codes/Company IDs to Ledgers
- Activities and Field Movements
- Update of Line Items
- Ledger Selection
- Tools to check your set up

## **Setting up the FI-SL Environment: Objectives**





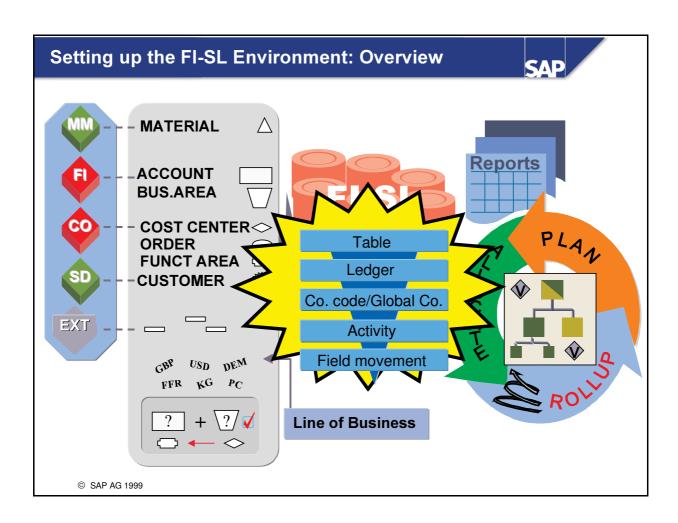
- At the completion of this unit, you will be familiar with the most important FI-SL master data and assignment criteria that enable the FI-SL tables to be updated.
- The following concepts will be explained: company code, company, ledger, activity, field movement, ledger selection
- You will have an understanding of factors influencing data volume and performance.
- You will know the advantages of splitting up data into quantifiable, qualitative and manageable ledgers.
- You will be able to check your settings prior to posting.

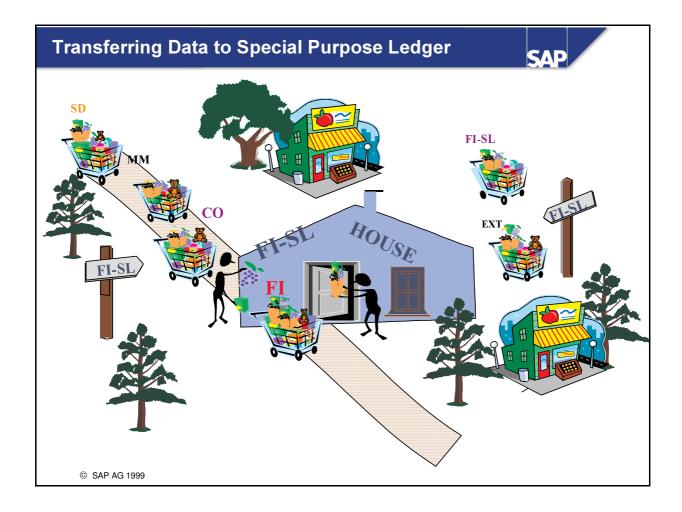
# Setting up the FI-SL Environment: Business Scenario



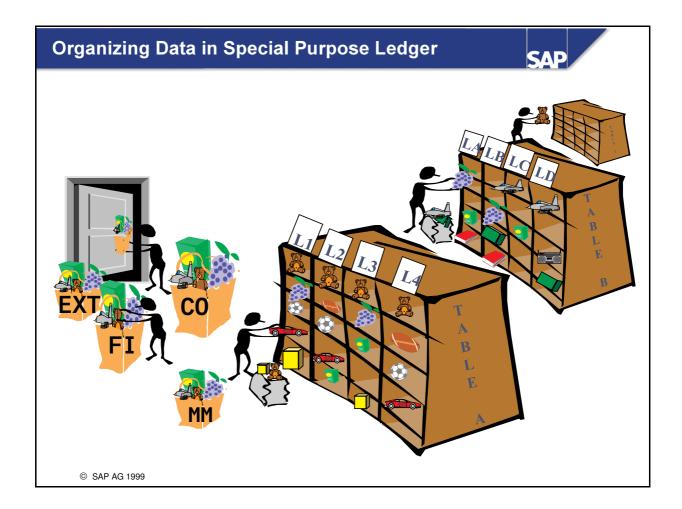


- Using our newly created field and reporting database, we will define the actual organizational structure of FI-SL.
- In addition, based on the amount of information required, we will determine at what level in the organizational structure line item records should be available.
- Before postings are made, the tools provided by FI-SL for checking the settings will be utilized.

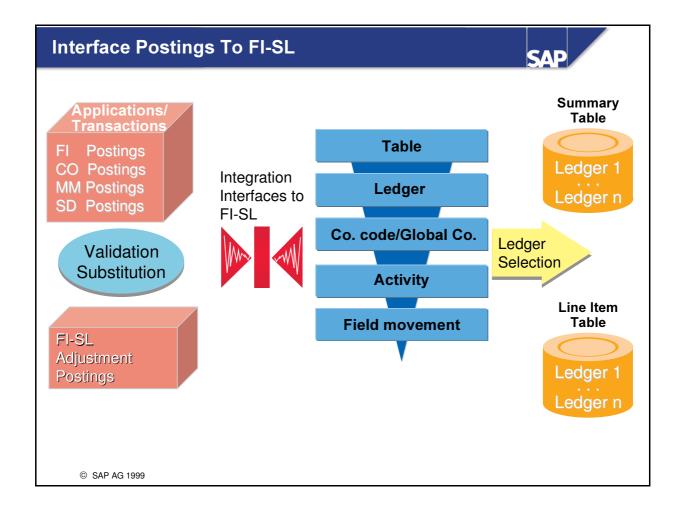




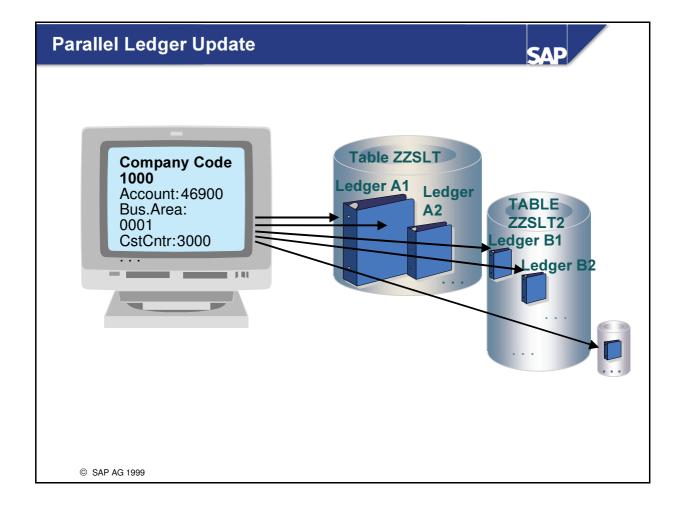
- Most data that enters the FI-SL System come from transactions occurring in many different places. A business transaction can enter the FI-SL System via another SAP application, via direct input to the FI-SL System, or via external systems.
- All data that enters the FI-SL System is processed by the Integration Manager. Through user-defined selection, validation, and substitution conditions, the Integration Manager determines if and how data should be posted to the FI-SL databases.
- Example:
  - In Logistics, the Material Management System (MM) supplies information on inventory movements, as well as the results of invoice verification. Data can also be transmitted from Sales and Distribution (SD).
- Data can also be transmitted from Financial Systems (FI).
- The Cost Accounting modules (CO) transmit relevant data about costs on cost centers (CO-CCA) or orders/projects (CO-OPA).



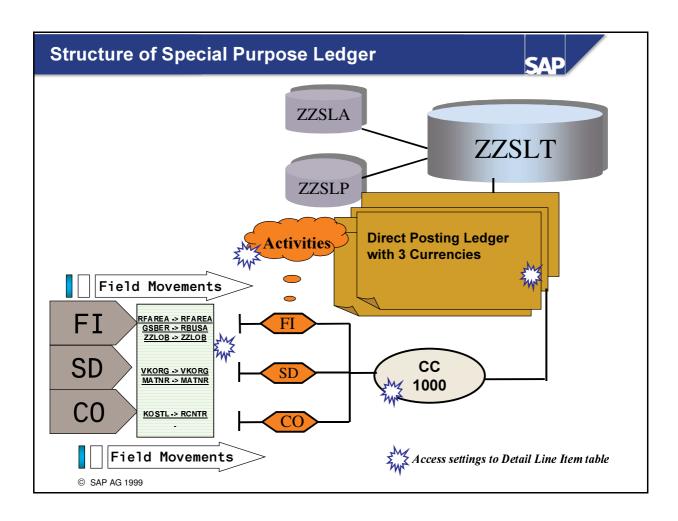
- Organizing Data in FI-SL
- The Integration Manager processes the transaction data.
- Within the FI-SL System, you define ledgers that contain dimensions from an FI-SL database table. Depending on how you define a ledger, the Integration Manager determines:
  - which data is posted to a ledger
  - how data is summarized in a ledger
- The Integration Manager also processes incoming transaction data according to certain user-defined conditions, such as validation, substitution, and ledger selection conditions.

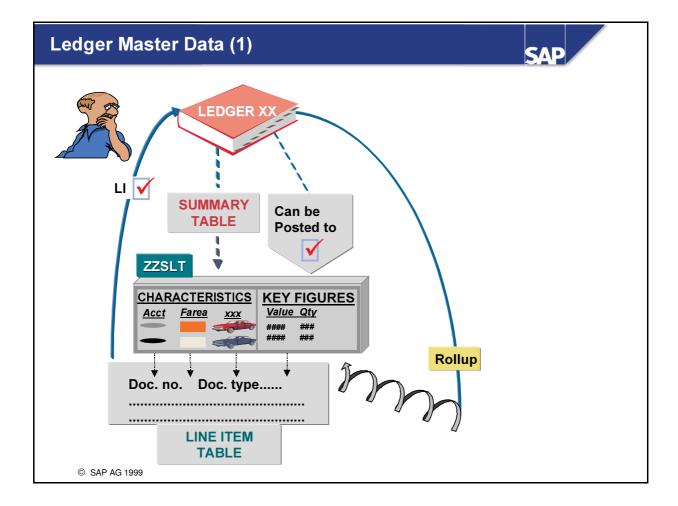


- Data that is transferred to FI-SL from other SAP applications, from external systems or from FI-SL adjustment postings, is updated as summary records (with line items, if required) in user-defined TABLES.
- This data is stored in local LEDGERS (for company codes) and in global LEDGERS (for global companies).
- You can assign your company codes or global companies to one or more LEDGERS.
- The system groups together the various accounting transactions into ACTIVITIES.
- From these activities you can transfer any code combinations to your ledgers. A FIELD GROUPING CODE is used to do this.

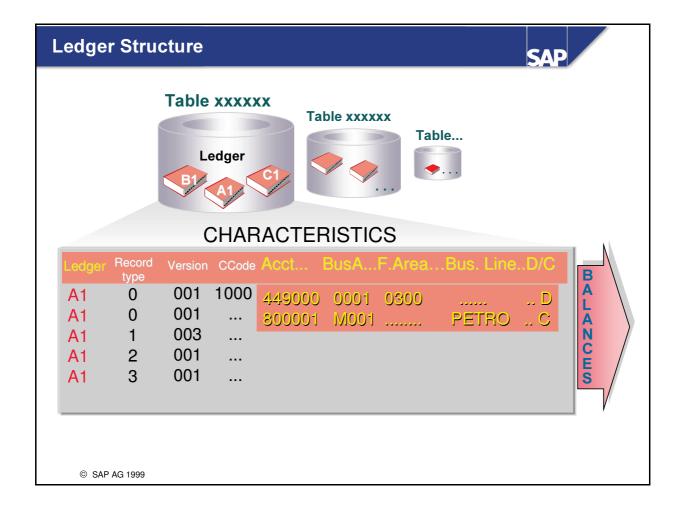


■ The subdivision of data into ledgers enables you to simultaneously store data at various levels of detail.

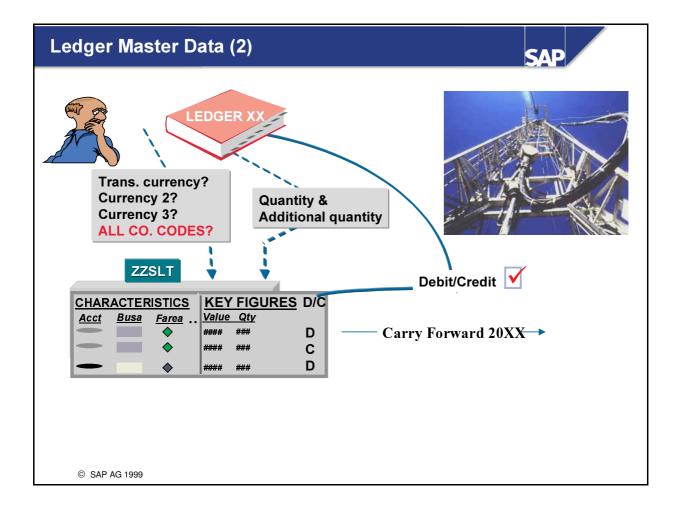




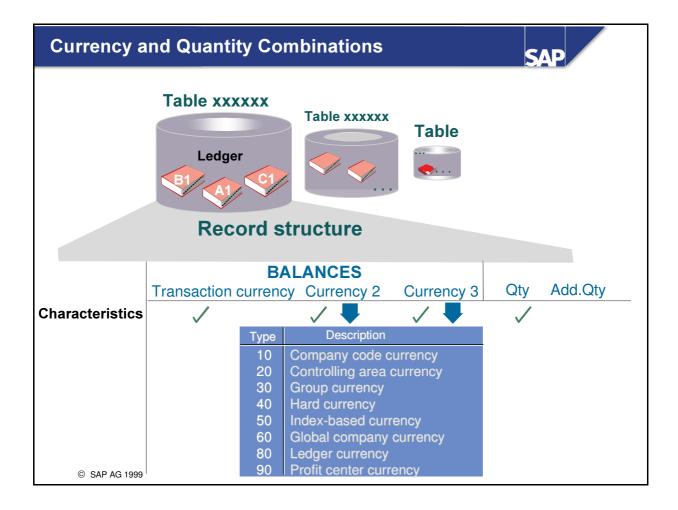
- When you create a ledger, you must determine the following:
  - In which summary table is the ledger data to be updated?
  - Can the ledger be posted to?
  - Can the ledger be used as a rollup ledger?
  - Should the ledger store line items (that is, for ALL company codes (or global companies) that supply the ledger with data)?



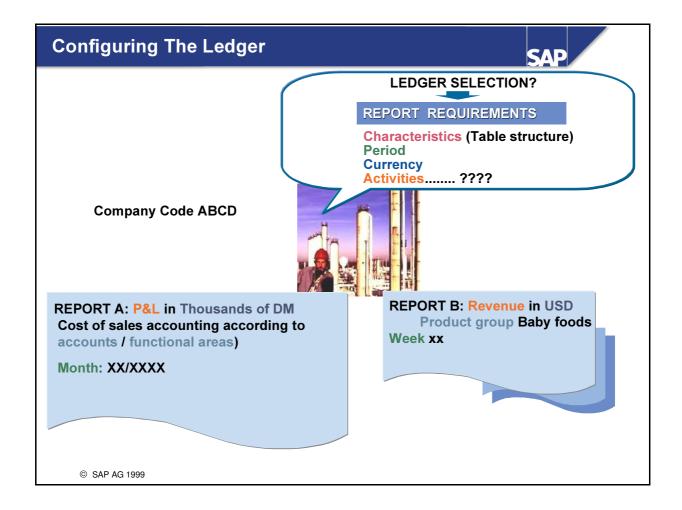
- Based on its table structure, a ledger is a suitable framework for storing user-defined CHARACTERISTIC combinations and the appropriate balances.
- The RECORD TYPE flags the balances as actual data (0), plan data (1), allocated actual data (2) or allocated plan data (3)
- Each record type can have up to 999 VERSIONs. You can use these versions to compare different valuation bases for planning or allocation. Actual data which is transferred to FI-SL via the integration interface, is automatically assigned version 001. For FI-SL adjustment postings, you can assign delta versions that are stored separately.
- Summary data in a ledger can also be stored separately as debit and credit data.



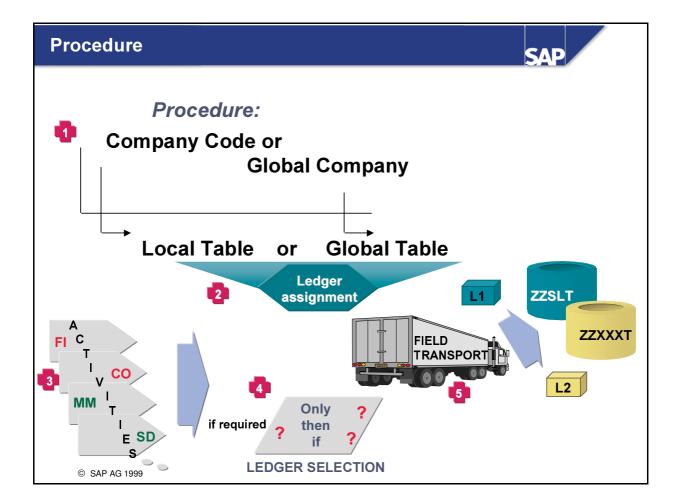
- You must also define the following at ledger level:
  - if the ledger balances are to be stored in transaction currency,
  - which 2nd and/or 3rd currency should be updated and if this applies to ALL company codes,
  - the currency key, if the ledger currency is selected as the additional currency
  - if currencies and additional currencies are to be stored in the ledger
  - if balances are to be maintained in debit and credit
  - if these balances are to be carried forward to the following year. For any postings which are then made to previous year periods the balances will then automatically be transferred to the carry forward period of the following year



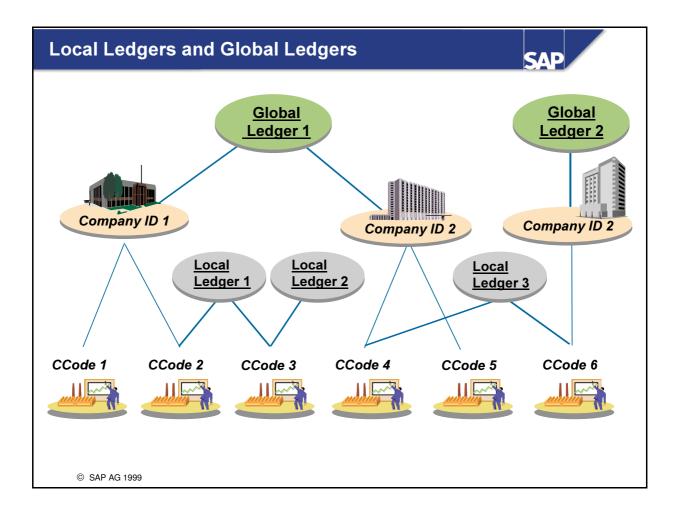
- When defining your ledger for updating balances, you can select out of up to five KEY FIGURES.
- You can decide whether the balances are to be stored in TRANSACTION CURRENCY for ALL company codes that store their balances in the ledger. The transaction currency is the currency in which the transaction was originally entered.
- You can store QUANTITIES and ADDITIONAL QUANTITIES at the same account assignment level.
- The currency key and units of measure respectively are used as further means of differentiation for the transaction currency balances and quantity balances.
- In addition to the transaction currency, you can store balances in a SECOND and/or THIRD currency. These combinations can be stored for ALL company codes or ALTERNATIVELY for only ONE company code or for SPECIFIC company codes in your ledger.



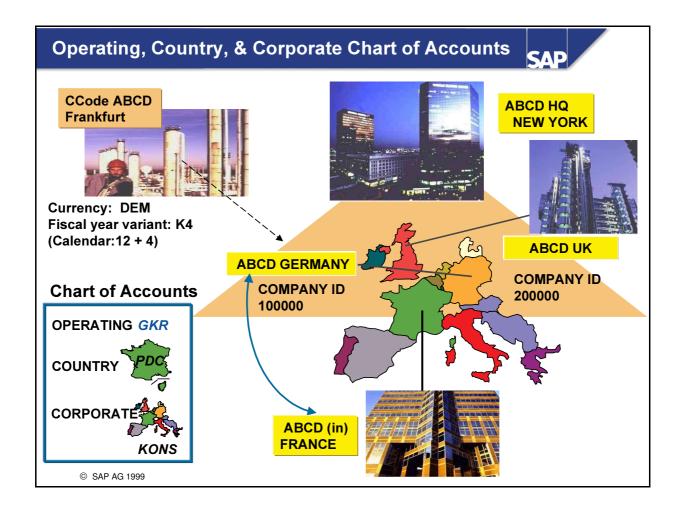
- In company-specific reporting, the criteria for creating this summary information can be diverse and can differ in the following aspects:
  - Combinations of user-defined account assignments (for example, account, cost center, product group,...)
  - Comparisons (different versions of actual data, plan data, allocated actual data, allocated plan data, quantity update and various currencies)
  - Time (month, quarter, week, non-calendar fiscal year, ...)
  - Selected business transactions (for example, general ledger account postings for a profit and loss statement, revenue postings, and goods movement, etc.) and different field movements
  - Individual selection conditions



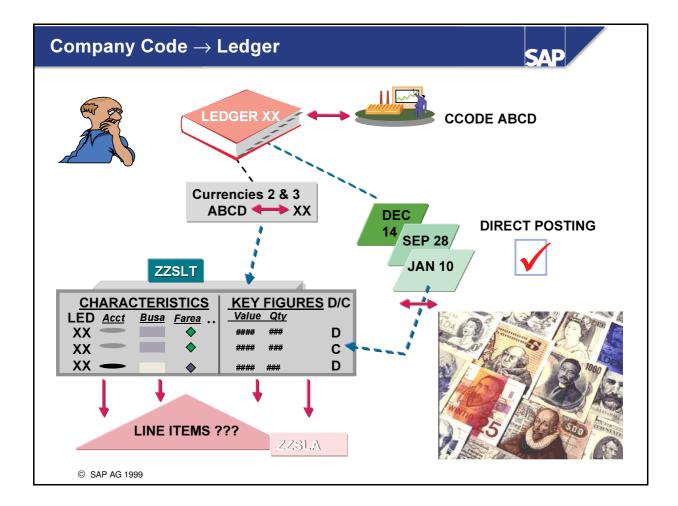
- To set up the FI-SL system so that data can be posted to FI-SL, proceed as follows:
  - Assign your company code (or global company) to a ledger.
  - Assign the relevant activities to your ledger.
  - If you want to link conditions to activities, you must define ledger selection conditions.
  - Using a field movement, you must define the fields (characteristics) that you want to transfer to your ledger for the activities.



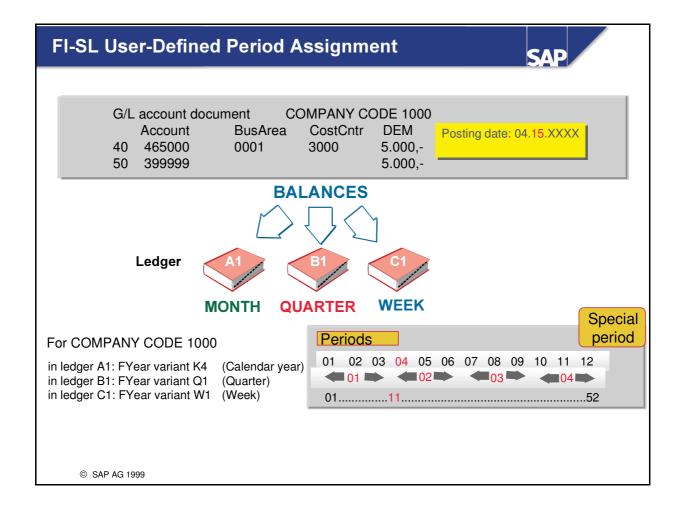
- There are two types of special purpose ledger:
  - Local ledger: This type of ledger uses the organizational unit COMPANY CODE.
  - Global ledger: This type of ledger uses the organizational unit COMPANY ID.



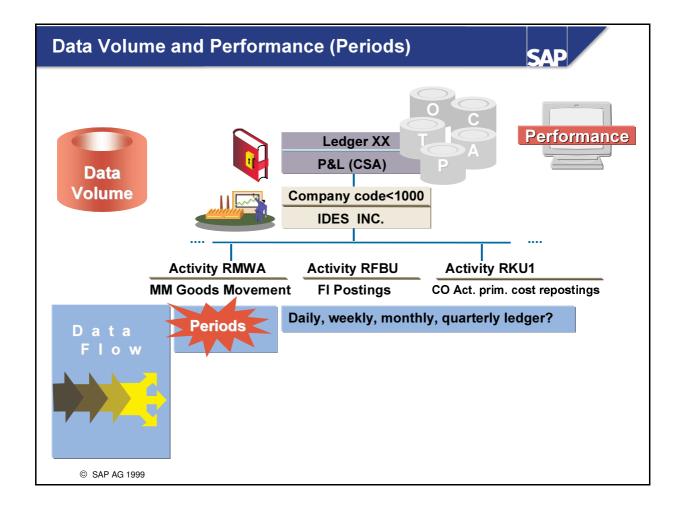
- A company code is the smallest organizational unit in external accounting for which a complete self-contained set of accounts can be drawn up for the purposes of external reporting. A company code records all accounting-relevant transactions in local currency. In addition to the local currency, it may also be required that you store data in an additional currency (for example, hard currency or index-based currency).
- The global company is the smallest organizational unit in a corporate group. Individual financial statements for global companies can be drawn up according to the relevant commercial law. A global company can consist of one or more company codes.
- There are three types of chart of accounts in the SAP system. They can all be used in FI-SL.
  - **Operating:** for integrated, cross-company, standardized classification of the operating business transactions. Financial accounting and cost accounting must use the same chart of accounts.
  - **Country:** for displaying posted data according to country-specific criteria (for example: Plan de comptes (France))
  - **Corporate:** for displaying posted data according to the requirements of the external group accounting.
- Example: The German subsidiary (global company 100000) of an American corporate group maintains a US American-oriented chart of accounts (corporate chart of accounts) parallel to the operating German chart of accounts.
  - This German company has a plant located in France that is represented as a company code and for which the local French chart of accounts is used as the country chart of accounts.



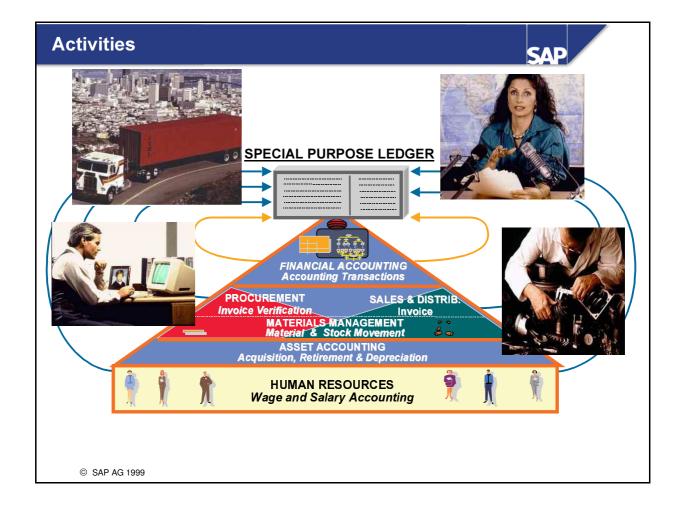
- When assigning a company code to a ledger, you define the following:
  - if the combination is released for direct posting
  - how the posting periods should be determined. This is defined by the fiscal year variant selected for this combination. In doing so, you can maintain summary balances for a company code (or global company) at different time intervals (yearly, quarterly, monthly, weekly) at the same time in several ledgers
  - the 2nd and 3rd currency to be stored for this combination (if you have not already defined the currencies at ledger level)
  - whether line items are to be written for this combination



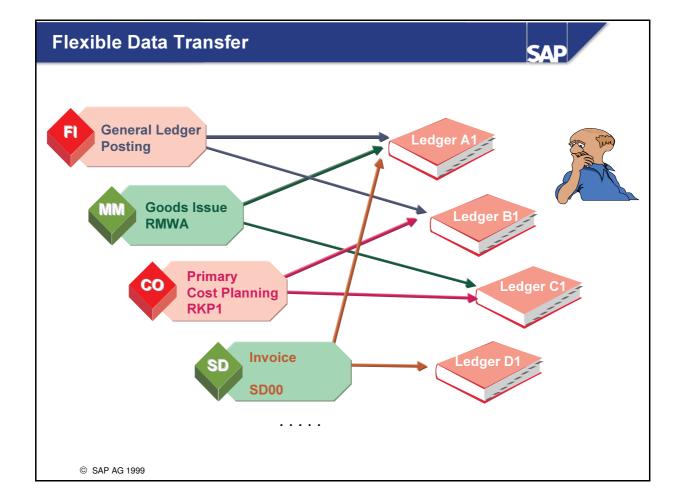
- In FI-SL, you can define various periods for a company code.
- When assigning company codes to ledgers, you need to assign a FISCAL YEAR VARIANT to each ledger.
- The fiscal year variant can either be the same or differ from the fiscal year variant in financial accounting.
- This allows you to simultaneously maintain totals for a company code in various ledgers, for example for:
  - monthly income statements
  - · weekly sales
  - quarterly results in summarized form



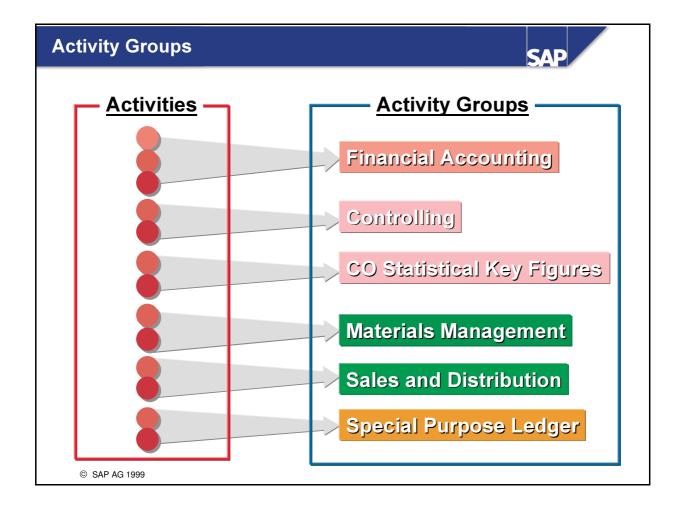
- You decide on the period definitions used for your report balances (on a daily, monthly, quarterly, or weekly basis, ...) based on how often you need your reports and how up-to-date your report data is to be. This decision also influences the data volume in your system.
- You make this definition for the company code (company) / ledger combination.



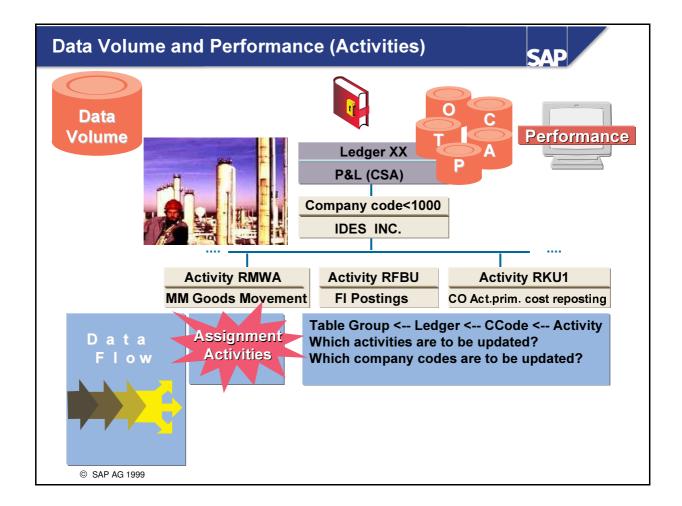
- You select specific 'activities' (business transactions) for your ledger. Using the FI-SL information system, you can report on several Characteristics across the company.
- Each SAP application or external system, which sends data to the Integration Manager, transfers the data into the FI-SL System with a corresponding activity. An activity classifies each source of data sent to the Integration Manager and groups together data that is to be processed the same way.



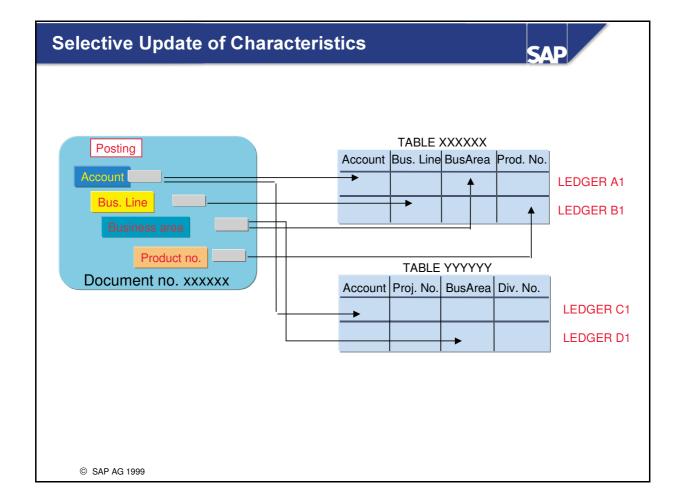
- The business transactions that enter into FI-SL from other SAP applications or external systems, are transferred to the update interface as ACTIVITIES. The activities are used to classify the transferred data into business-related categories. Business transactions that are processed in the same way are combined into groups.
- If an application calls up the FI-SL integration interface the data is transferred using the appropriate activity.
- The ledgers are selected for update depending on this activity.
- If you decided not to update line items at ledger level or at ledger-company code level, you can do so for specific activities.



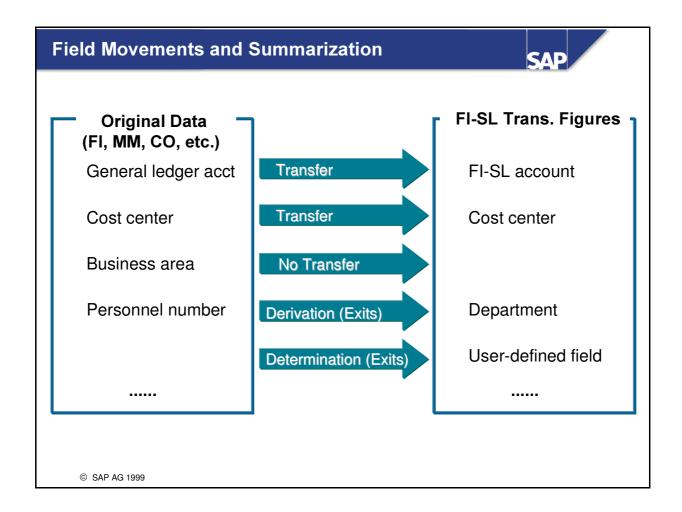
- The individual activities from other applications are combined into activity groups. You can assign these activity groups to your ledgers.
- Common activities are grouped together (for example, all MM activities), so that it is no longer important for you to assign a specific activity to a ledger. You simply assign the activity group code to a ledger, and the system automatically assigns the relevant activities.



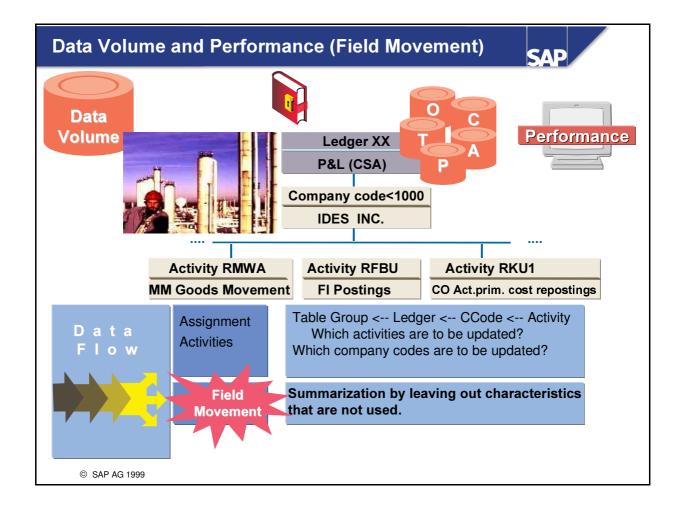
■ You should pay close attention when selecting the activities that you require for transferring your data. Not required and redundant information can be avoided by choosing only those activities that meet your reporting data requirement.



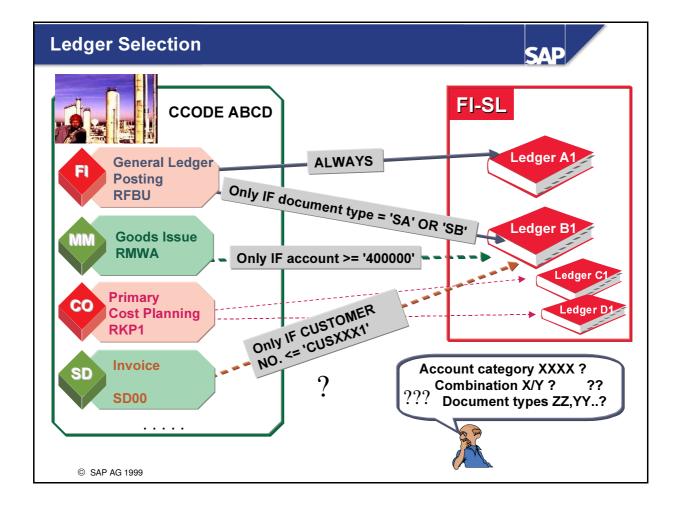
- The ledger provides a logical structure for forming totals.
- Any number of ledgers can be updated with various field combinations from one account assignment.



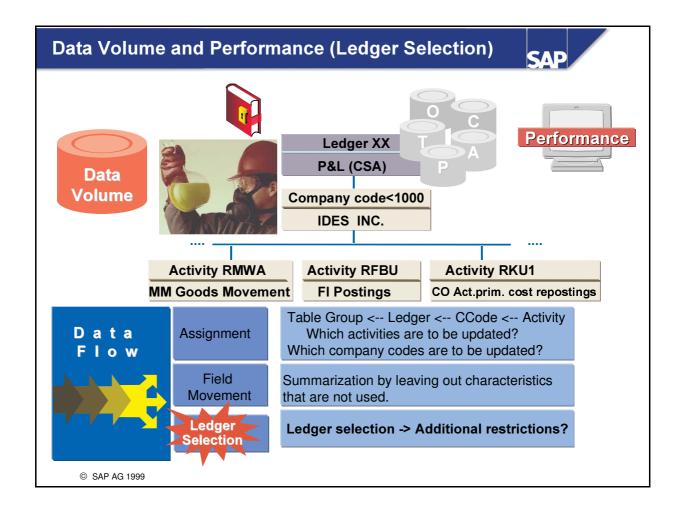
- In order to obtain the level of detail you require in your summary records, you can select sender characteristics using a field movement and transport them to the receiver characteristics specified for your ledger.
- If a 1:1 assignment is not possible or not required, you can use an exit in the ABAP routine to derive or determine the characteristics.



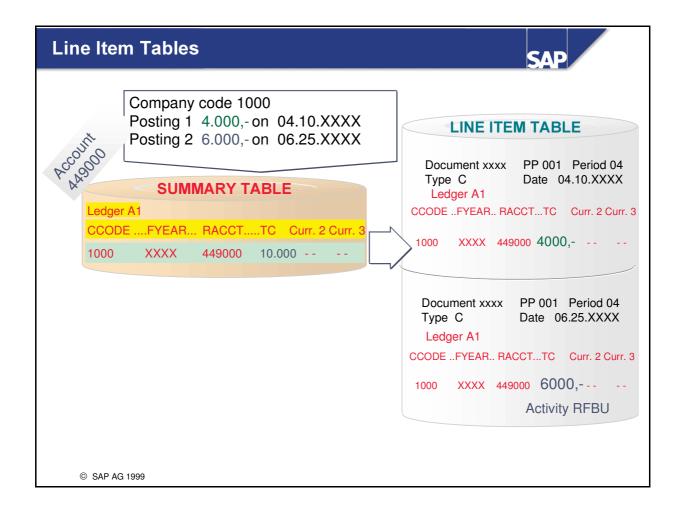
■ The data volume will be reduced if you only transfer the characteristics that you actually need.



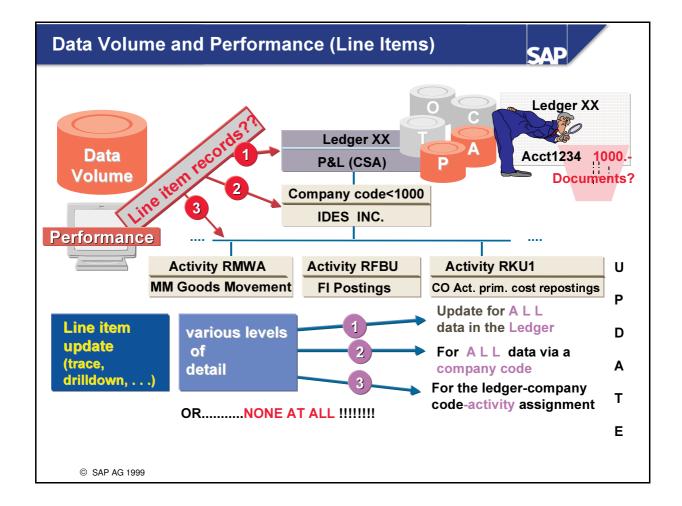
- By combining specific conditions with your activities, you can define the criteria according to which your ledgers are selected for update.
- The rules you used to define validations and substitutions can also be used to define the ledger selection conditions.
- Example for a Ledger Selection Rule to limit certain products for a revenue account:
  - (<ACCIT> \$MATNR >= '1111' AND <ACCIT> \$MATNR <= '1999')
  - <ACCIT> \$HKONT = '800000'
    - (If the Material number entered in the accounting document is in the range 1111 to 1999 and the account number is 800000)



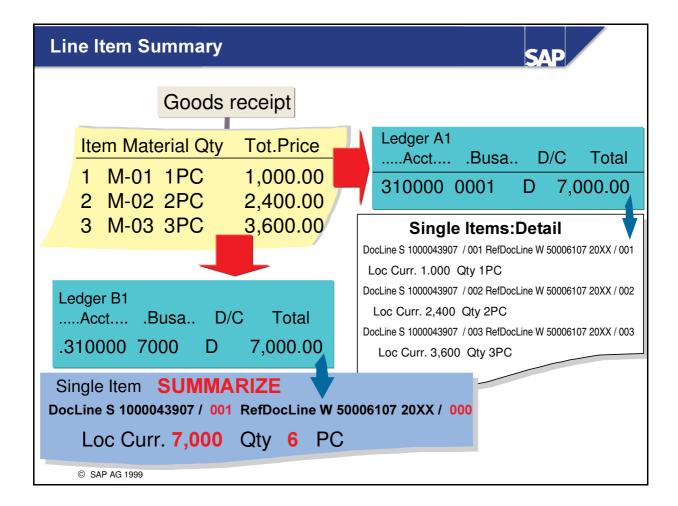
■ The data volume will also be reduced if you define selection conditions that are based on system values. This is done by entering selection conditions for a ledger.



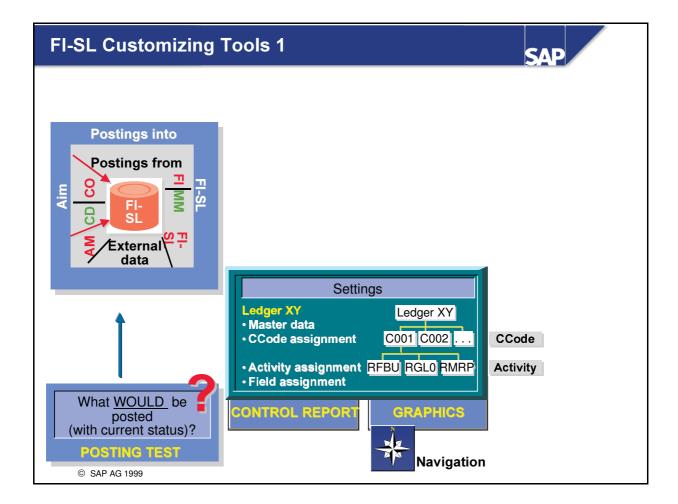
- Line items can be stored for summary records that are updated in FI-SL.
- You can update line items at various levels:
  - at ledger level (that is, for ALL company codes assigned to the ledger)
  - at company code / ledger level
  - at activity level
  - at the activity / ledger / company code level



- Line items can be stored for summary records that are updated in FI-SL.
- You can update line items at various levels:
  - at ledger level (that is, for ALL company codes assigned to the ledger)
  - at company code / ledger level
  - at activity level
  - at the activity / ledger / company code level
- If you do not need line item information for your summary records you will certainly reduce volume and performance bottlenecks by deciding not to set the line item indicator at any of these levels.



- Line Item Summary with Ledger Update
- You can choose a function in Ledger maintenance which allows you to summarize the line items updated in .a ledger. The items are summarized according to the coding block (user-defined field movement) that is active during posting to the ledger. In this way, you can summarize line items into a single line item that differ only in their account assignments and that are not relevant to the ledger in question.



- To check your FI-SL Master Data settings you can use the Customizing Tools to:
  - execute a Control Report with a listing of FI-SL Master Data assignments
  - make use of an Interactive Graphic Maintenance utility
  - conduct a Posting test prior to updating your ledger(s)

## **Control Report**

SAF

## Contents of the FI-SL Direct Posting Tables

Example:

Ledger ZZ

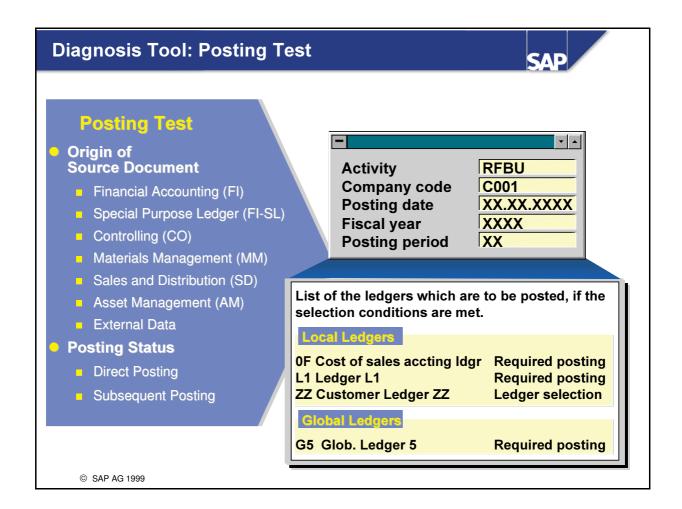
# **Customizing Example 1**

## **Ledger Master Data**

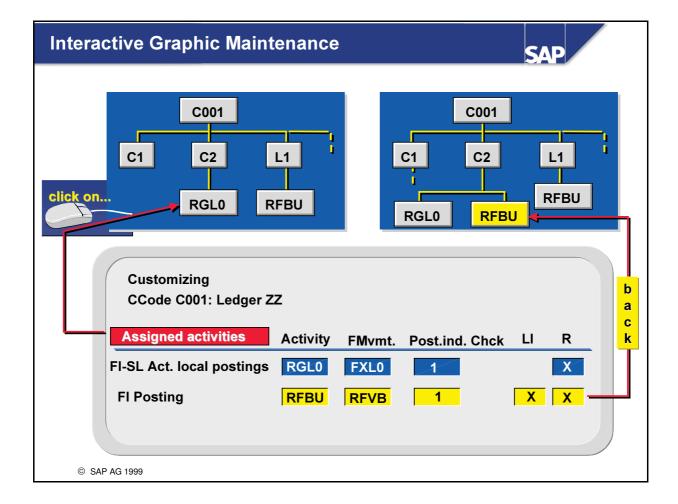
- Versions
- Assignment: Ledger ZZ <-> Company Codes
- Assignment: Activity Ledger ZZ <-> Company Code
- Master Data of the Assigned Company Codes
- Field Movements
- Balance Carry Forward Standard Accounts
- Balance Carry Forward User-Defined Field Movements
- Fields in the Table ZZSLT

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- The control report gives you an overview of the FI-SL direct posting tables and thus a complete log of the most important customizing entries.
- You can call up a complete list of settings or a settings log for:
  - a ledger/ledger interval or
  - a global company/global company interval, or
  - a company code/company code interval



- Using the posting test function, you can enter a specific activity to find out if and which ledgers have been updated based on the current customizing entries.
- You can also find out the reason why data was not posted to a specific ledger. If necessary, you can jump to the exact customizing screen where the change must be made so that the ledger can be updated.



- Graphical navigation in some areas of FI-SL customizing.
- A hierarchy consisting of a ledger, company code or global company, and activity which has been created using the normal customizing functions, can be displayed as a graphic.
- Within the graphic, you can click on the individual hierarchy nodes (ledger, company code, and so on). The system jumps from the graphic to the customizing transaction that corresponds to the hierarchy node you clicked on. Here you can make interactive changes (for example, to assign a new company code or activity). When you exit the customizing transaction and return to the graphic, your changes will be displayed in the graphic.
- Using this tool, you can directly check the individual customizing actions and make any necessary corrections.

# **SIMPLY PUT: Creating a Ledger (1)**

SAP

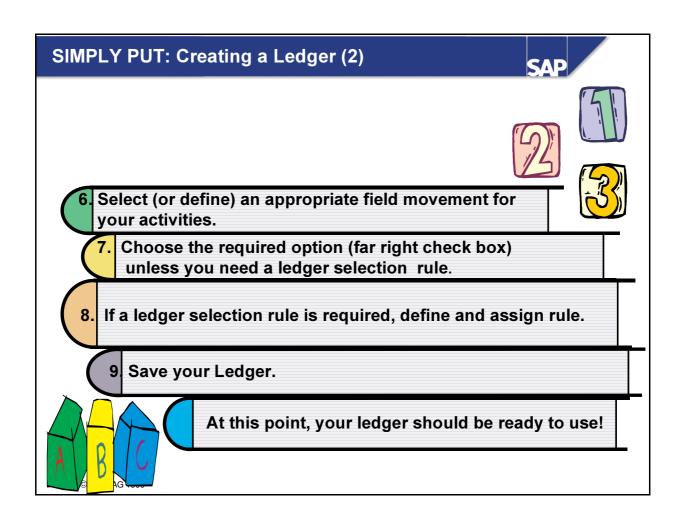




- Choose a 2 character ledger name, a description and link it to a SL table.
- 2. Choose your ledger settings ie. ledger posting allowed, write line items, maintain d/c.
- Select the currencies and quantities to be maintained and Which currency type to use if you chose Ledger currency as the 3rd currency.
  - 4. Save and link your company code (s) to your ledger, and choose a fiscal year variant.



5. Save your company code assignment and link activities to your company code.



# **Setting up the FI-SL Environment: Summary**





• In this unit you were given a comprehensive introduction to the most important FI-SL master data settings which influence what and which manner data is passed onto and managed in the FI-SL system. You were also made aware of volume and performance considerations which should guide you in the choices you make.

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## **Exercises**





# Unit: Setting up the FI-SL Environment

**Topic: Ledger Assignments** 

At the conclusion of this exercise, you will be able to:

- Create a Ledger
- Assign Company Code to Ledger
- Create relevant Field Movements
- Choose the appropriate Activities and assign them to the Company Code/Ledger



Using our newly defined field and reporting database, we will define the actual organizational structure of FI-SL.

In addition, based on the amount of information is required, we will determine at what level in the organizational structure, line item detail records should be available.

To define FI-SL master data use the following

#### Menu Path:

SAP Easy Access —Activity Group SL:Reporting\_Analyst—IMG—Customizing Edit Project

SAP Reference IMG o Financial Accounting o Special Purpose Ledger o Basic Settings o Master Data o Maintain Ledger o

Select 'Create Ledger'

## 1-1 Ledger and Assignments

### 1-1-1 Create a Ledger

Logon Group ID	Ledger	Logon Group ID	Ledger
01	AA	10	JJ
02	BB	11	KK
03	CC	12	LL
04	DD	13	MM
05	EE	14	NN
06	FF	15	OO
07	GG	16	PP
08	HH	17	QQ
09	II	18	RR

Create your Ledger to the Summary Table ZZSLT.

Additional Settings: Set the indicators for Ledger postings

Balance Carry Forward and Maintain d/c

The stored currencies for your Ledger should be the transaction currency, company code currency (2) and Ledger Currency (3).

Set the Ledger Currency to USD.

Quantities: Only the 'Store quantities' indicator' should be set.

### 1-1-2 Ledger Versions

Define Version 1 for Actual and Manual Plan Data

## 1-1-3 Assignment Company Code to Ledger

Assign your Company Code ACXX to your Ledger.

This combination should be released for direct posting and use the Fiscal Year Variant K4 (Calendar year and 4 special periods)

In addition, line items should be written for your combination.

### 1-1-4 Assignment Activities and Field Movements

To post to your Ledger/Company Code combination you need appropriate activities. Choose the activity for 'FI Postings'.

For this activity you need a new Field Movement FIxx (xx = Group Number).

Field Name or Data Type	Values

Field movement FIxx 'FI postings for Group XX'

Receiver table ZZSLT

Sender table ACCHD ACCIT\_GLX ACCCR

Direct posting fromFI, AM, MM, SD

RecField Sender.table Send.fld

RACCT ACCIT GLX->HKONT

RBUSA ACCIT GLX ->GSBER

RMATNR ACCIT GLX -> MATNR

RZZLOB ACCIT GLX ->ZZLOB

RFAREA ACCIT GLX ->FKBER

Save your Field movement

The Sender fields from ACCHD, ACCIT\_GLX and ACCCR should be HKONT, GSBER, FKBER, ZZLOB and MATNR and be assigned to the relevant fields in ZZSLT. Choose the "R" version of each field about for your receiver.

Initially your activity will be used just for direct posting.



Your activity will not be set as a 'required' activity but must meet the conditions set out in the next step.

## 1-1-5 Ledger selection

Your Ledger/Company Code Combination will receive only those FI postings that fulfil the following conditions:

Only the products T-IC-F1001 to T-IC-F1003, T-IC-R2007 to T-IC-R0009 for Revenue Accounts 800200-800400 will be accepted. For the Functional Areas (Sales Administration and R&D) only Expense accounts will be accepted).

The Rule SELLOB1 has been set up in the system to serve this purpose.

Enter this as &SELLOB1 in the Ledger Selection and save.





**Topic: FI-SL Customizing Tools** 



At the conclusion of this exercise, you will be able to:

• Use the Customizing Tools to check the settings



Before postings are made, the tools provided by FI-SL for checking the settings will be utilized

#### 2-1 Checking your Master Data settings

To check your FI-SL Master Data settings, use the following,

#### Menu Paths:

SAP Easy Access —Activity Group SL:Reporting\_Analyst—IMG—Customizing Edit Project

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools

#### 2-1-1 Control Report

Display a Control Report for your **Ledger** settings

#### 2-1-2 Perform Diagnosis: Posting Test

Execute a Posting Test for your Ledger settings relevant to Direct Posting of Financial accounting (FI) Documents.

Enter the appropriate Activity and your Company Code with today's posting date and current year.

List the Ledger(s) that would be posted to.

In case your Ledger is not listed, enter the name of your ledger under 'One ledger not posted' and execute again. The reason for not posting will be given. Change your setting(s) in the FI-SL Master Data accordingly.

#### 2-1-3 Additional Field Movement

To enable us to enter adjustment postings later in FI-SL, you will have to create an appropriate Field Movement.

In FI-SL Master Data, choose the option 'Field Movement', then the menu 'Field Movement>Create'. and define the Field Movement **SPxx** (xx = your group number). The receiver table is ZZSLT and the sender table is GLU1.

•

Field movement SPxx 'FI-SL postings for Group XX'

Receiver table ZZSLT

Sender table GLU1

RecField Sender.table Send.fld

RACCT GLU1 RACCT

RBUSA GLU1 RBUSA

RFAREA GLU1 RFAREA

RMATNR GLU1 RMATNR

RZZLOB GLU1 RZZLOB

Save your Field movement

Using the button 'Proposal' you can then choose the appropriate Receiver and Sender Fields for Account (RACCT), Business AREA (RBUSA), Functional area (RFAREA), Line of Business (RZZLOB) and Material number (RMATNR). Save your Field Movement.

#### 2-1-4 Graphic Navigation

To enable us to enter Adjustment Postings in FI-SL later, you will have to choose the activity RGL0 and assign your own Field Movement SLxx (xx = your group number) to allow the following fields to be updated: Account, Business Area, Functional Area, Line of Business and Material number.

Call up the Graphical Navigation function and enter your ledger with the posting status 'Direct posting'. When the graphic is displayed, double-click on the Activity RFBU for your company code. You will then be passed to the 'Change Ledger: Assign Activity' screen.

Activate the button 'Choose activities' and position on the activity 'RGL0'.

Double-click on this and then enter your Field movement 'SPxx'. Set the Posting indicator to '1' and mark the activity RGL0 as a 'Required posting'.

Save your entry and then return with the 'EXIT' Icon to view your graphic again where you can check your new setting.

## **Solutions**



Unit: Setting up the FI-SL Environment

**Topic: Ledger Assignments** 

To define FI-SL master data use the following

Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SAP$   $Reference\ IMG 
ightharpoonup Financial\ Accounting 
ightharpoonup Special\ Purpose\ Ledger 
ightharpoonup Basic$   $Settings 
ightharpoonup Master\ Data 
ightharpoonup Maintain\ Ledger\ 
ightharpoonup Create\ Ledger$ 

- 1-1 Ledger and Assignments
  - 1-1-1 Create a Ledger

Menu Path: Maintain Ledgers → Create

Ledger: AA (BB,CC etc. to RR)

Description: Ledger for Group XX

Under category Basic settings: assign your ledger to Summary

table:ZZSLT

Additional settings:

- x Ledger post.allowed
- x Set up balance c/f x Store line items
- x Maintain d/c indicator x Productive
- x Summarize

Stored currencies:

- x Transaction currency
- >> Define currencies

Choose 2<sup>nd</sup> Currency. Select 10 Co. Code curr

Choose 3rd Currency. Select 80 Ledger currency

Define Ledger Currency as USD

Stored quantities:

x Store quantities

Remember when we constructed the ZZSL Table Group, we deselected the  $2^{nd}$  Ouantity field to improve performance.

#### 1-1-2 Ledger Versions

Define Version 1 for Actual and Manual Plan Data

 $Menu \rightarrow Versions$ 

Version Act. Manual plan Version descrptn.
1 x x Version 1(GXX)

Now save your Ledger.

#### 1-1-3 Assignment Company Code to Ledger

Assign your Company Code ACxx to your Ledger.

This combination should be released for direct posting and use the Fiscal Year Variant K4 (Calendar year and 4 spec. periods).

In addition, line items should be written for your combination.

Button: Assign comp. cd/comp.

Scroll down in the second section of the screen to find your company code ACxx and then **double-click** on it for the assignment. Use the Position Button and input your ACXX company Code

Create Ledger: Assign Company Code

CoCd. ACxx

Ledger AA(BB...RR)

Assignment criteria:

Blocking indicator 1

Fiscal year variant K4

**x** Write line items

Enter

Now save your Assignment Ledger/Co. Code.

#### 1-1-4 Assignment Activities and Field Movements

To post to your Ledger/Company Code combination you need appropriate activities. Choose the activity for 'FI Postings'.

For this activity you need a new Field Movement FIxx (xx = Group Number).

The Sender fields from ACCIT\_GLX should be HKONT, GSBER, FKBER, ZZLOB and MATNR and be assigned to the relevant fields in ZZSLT.

Initially your activity will be used just for posting to directly.

Your activity will not be set as a 'required' activity but must meet the conditions set out in the next step.

From the 'Create Ledger, Assign Company Code' menu choose '*Environment*', then '*Field movement* → *Create*'

*Field Movement:* **FIxx** (**xx** = group number)

Field movement Fixx 'FI postings for Group XX'

Receiver table ZZSLT

Sender table ACCHD ACCIT\_GLX ACCCR

Press the Proposal Button and select the following combinations

RecField	Sender.table	Send.fld
RACCT	ACCIT_GLX	HKONT
RBUSA	ACCIT_GLX	<b>GSBER</b>
RFAREA	ACCIT_GLX	FKBER
RMATNR	ACCIT_GLX	MATNR
RZZLOB	ACCIT_GLX	ZZLOB

Use the Select icon to choose multiple fields.

You will get a list of Sender/Receiver field combinations the system can suggest to you by using the button 'Proposal', pick those you need and bring them into your Field Movement

Now save your Field movement.

Go back to the screen 'Create Ledger: Assign Company Code'

Set your cursor on your company code and press the button 'Assign activity'

Select the button 'Activity groups' and choose Financial Accounting

Choose Posting Indicator "1"

Enter the following:

Field movement

**x** Financial accounting FIxx (xx = group number)



You do not need to cross off Line Items for your Field Movement, since you have already set this for the combination Ledger/Company Code.

#### 1-1-5 Ledger selection

Your Ledger/Company Co. Combination will receive only those FI postings that fulfil the following conditions:

Only the ice-cream products T-IC-F1001 to T-IC-F1003, T-IC-R0007 to T-IC-R0009 for Revenue Accounts 800200-800400 will be accepted. For the Functional Areas (Sales, Administration and R&D) only Expense accounts (4....) will be accepted.

The Rule SELLOB1 has been set up in the system to serve this purpose.

While you are still on the screen 'Assign Activity',

choose the Line with the activity 'RFBU' and remove the Required Posting setting.

Now save your settings.

You will receive the following message:

'W: Check the selection conditions'

Set your cursor on the activity RFBU and press the

Button 'Ledger selection' and enter.

Remove the condition 'False' and enter the Selection

Rule: &SELLOB

Save this

## **Solutions**



Unit: Setting up the FI-SL Environment

**Topic: FI-SL Customizing Tools** 

#### 2-1 Checking your Master Data settings

To check your FI-SL Master Data settings use the following

Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SAP$   $Reference\ IMG 
ightharpoonup Financial\ Accounting 
ightharpoonup Special\ Purpose\ Ledger 
ightharpoonup Tools$ 

#### 2-1-1 Display Control Report

Display a Control Report for your Ledger settings

Restricted data selection:

From ledger: Your Ledger (AA, BB etc...RR)

Detailing of the list

Level of detail: 4

#### 2-1-2 Perform Diagnosis: Posting Test

Execute a Posting Test for your Ledger settings relevant to Direct Posting of Financial accounting (FI)

Documents.

Origin of original document

x Financial accounting (FI)

Posting status:

x Direct posting

#### Press button 'Posting test'

Diagnostic parameters:

Activity: **RFBU** 

Company Code: Your Company Code ACXX

Posting date: Current date
Fiscal Year: Current Year
Posting Period: Current Period

Ledgers used for diagnosis:

x all posted ledgers

or in the case of a non-posted ledger

**x** One ledger not posted:

Your Ledger

In case your Ledger has not been posted to (2<sup>nd</sup> choice), the reason for not posting will be given.

Change your setting(s) in the FI-SL Master Data accordingly.

#### 2-1-3 Additional Field Movement

Create a Field Movement SPxx in the FI-SL Master Data

Field Movement: SPxx (xx = group number)

Field movement SPxx 'FI-SL postings for Group XX'

Receiver table	ZZSLT	
Sender table	GLU1	
RecField	Sender.table	Send.fld
RACCT	GLU1	RACCT
RBUSA	GLU1	RBUSA
RFAREA	GLU1	RFAREA
RMATNR	GLU1	RMATNR
RZZLOB	GLU1	RZZLOB



Use the "R" version of each sender & receiver field.

Save your Field movement

#### 2-1-4 Graphic Navigation

Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SAP$   $Reference\ IMG 
ightharpoonup Financial\ Accounting 
ightharpoonup Special\ Purpose\ Ledger$   $ightharpoonup Tools 
ightharpoonup Graphic\ Navigation$ 

Selection of view and parameters:

x Ledger Your Ledger

Posting status:

x Direct posting

Double-click on the Activity RFBU and after entering FI-SL Master Data Maintenance, assign the Activity RGL0 for your Ledger/ Co. Code Combination and include the Field Movement SLxx (xx = your group number).

Activity Field Movement Required

RGL0 SPxx

**Save** your activity and then return to the graphical navigation to check and see the appearance of the activity RGL0.

## **Through Postings and Adjustments**



### **Contents:**

- Example FI-Posting
- Adjustment Postings in FI-SI
- Master Data Validation
- Document Lines
- Document Display
- Summary Record Display
- After Posting Customizing Tools
- Transfer Postings

## **Through Postings and Adjustments: Objectives**





At the completion of this unit, you will

- know how online and transfer postings can be made to FI-SL from another SAP module
- know how to set up master data for characteristics to be used for postings within the FI-SL system
- be familiar with the FI-SL direct entry function
- be able to create a user table for FI-SL applications
- know how to access and view line items and summary records in FI-SL
- be able to use the FI-SL diagnostic tools

## Through Postings and Adjustments Business Scenario (1)





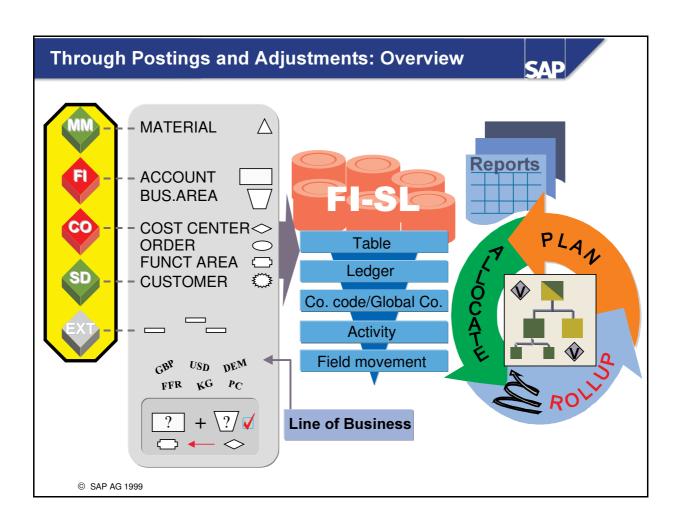
- To populate the FI-SL ledgers, overhead postings and revenues need to be posted from the feeder system into FI-SL
- Before the implementation of FI-SL is complete, certain application areas like FI and SD go live. It is therefore also necessary to transfer existing documents from outside into FI-SL
- We are required to set up a series of Business Line values for our new field Line of Business. This will allow us to post-process and organize data by manager. Therefore, we need to investigate how and where the necessary master data for this characteristic is stored and accessed for FI-SL activities

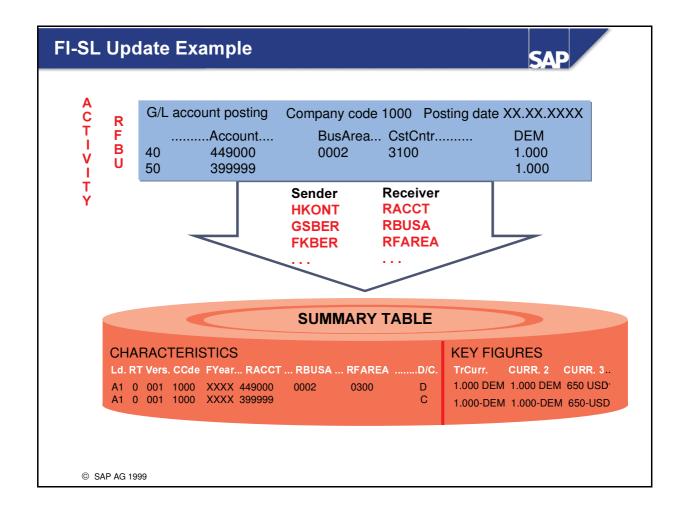
# Through Postings and Adjustments: Business Scenario (2)



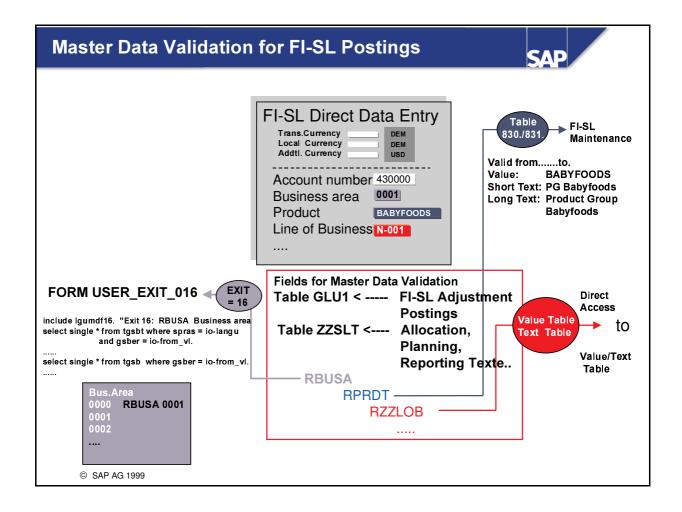


- On occasion, it is necessary to make adjustment postings in FI-SL by Line of Business in order to quickly adjust revenues for products which have been evaluated at standard.
- The direct entry functionality in FI-SI will be analyzed for this purpose
- Before and after making postings to the ledgers in FI-SL, the facilities provided for simulation, testing and troubleshooting should be investigated to support smooth and problem-free updates



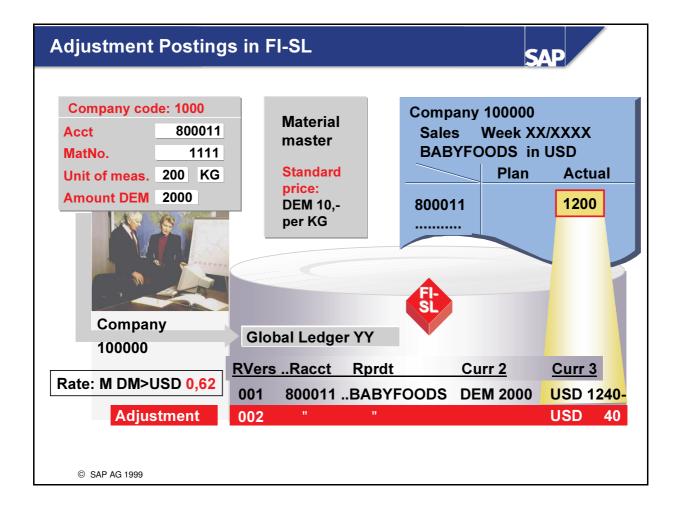


■ This example demonstrates how data from a general ledger account posting is updated in a FI-SL summary table.

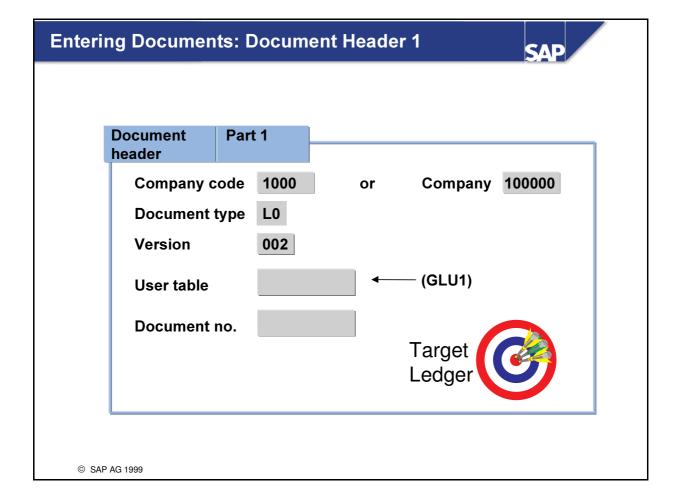


- There are basically three main methods for ensuring master data valuation for characteristics to be used in FI-SL transactions:
- Validation against an FI-SL master data table. These tables have a structure like in T830A. However, you have to define the tables in the DDIC beforehand, whereby you can use T830A as a reference table. After defining the tables, you must enter the tables in T800A with type CM and CT. FI-SL Configuration menu: Environment → Table directory. You then have to start program RGBCFL00, selecting the 'Access to integr. master data' option.

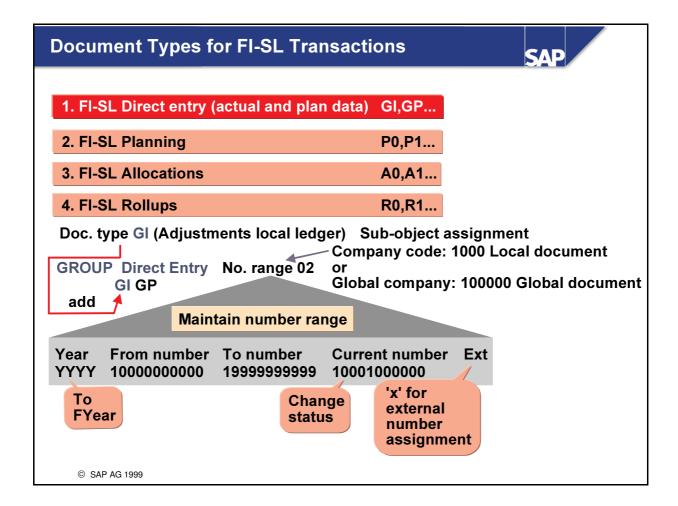
  You can maintain the tables in the FI-SL menu under *Environment* → *Integr. master data* → *Create*, Change,
- Validation using an exit routine. The exit is defined as =nn, where 'n' represents a number. The exit routine itself is stored in program SAPLGUMD.
- Validation against a value and text table (perhaps which you have set up yourself in the repository). This will eliminate the time-consuming definition of a user exit, as well as the double maintenance of master data in some FI-SI master data tables. The system generates automatic access routines that carry out master data validation and prepare texts for a field from entries in the block "Validation with value table" in view "Fields for master data validation" (table T800D).
- You may also use higher-level fields (for example, account is company code-dependent).



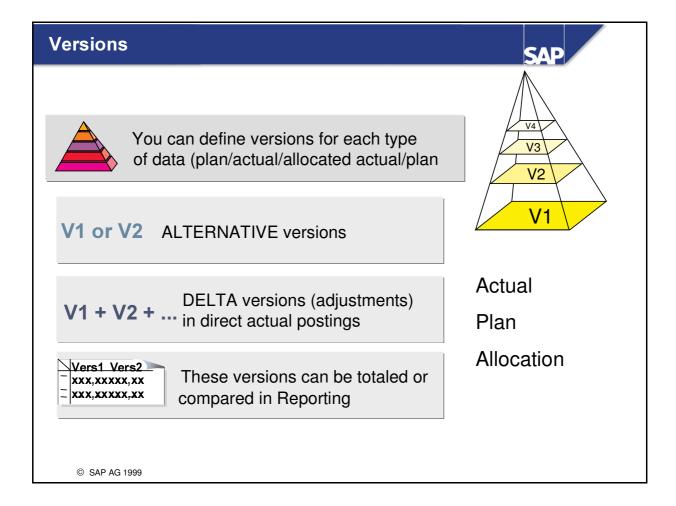
- Most data enters the FI-SL through the integration interface.
- You may want to enter a document directly in FI-SL for one of the following reasons:
- You want to post a document in FI-SL only.
- You want to post a document in different FI-SL versions. The postings made from the application modules FI, SD, and MM automatically receive FI-SL version 1. If you enter documents directly in FI-SL, you can use other versions.
- You want to manually enter the amounts for the additional currency (for example, ledger currency). If an additional currency that is manually entered in FI-SL is identical to the additional currency of the ledger to which the amount is posted, the amount is posted directly. No automatic translation occurs in this case.
- You want to post statistical quantities only.



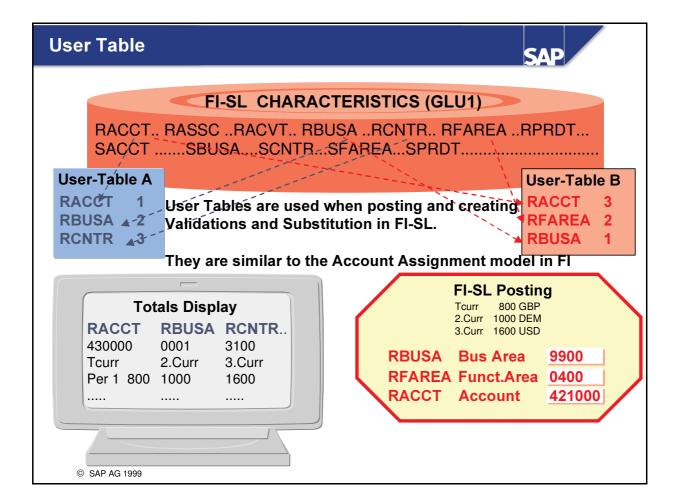
- The document header contains information that applies to the entire document. You must make the following entries:
  - Company code (Company ID)
  - Document type: The document type controls the following functions:
    - document number assignment
    - internal or external number assignment
    - currencies allowed for document entry
    - entry of actual or plan data
    - check whether the document balance is zero during document entry
  - Version: In this field, you enter the FI-SL version that you want to use for the document.
  - User table: Since this posting will update several ledgers and possibly several summary record tables, the system proposes the GLU1 table. The GLU1 table contains all variable fields in FI-SL. However, you can also enter an FI-SL table (for example, GLFUNCT) or a user table from T883S. The user table is a special view of the FI-SL characteristics.
  - Target Ledger: If you have assigned more than one ledger in Customizing but only want to post to one ledger during this posting run, you can specify your target ledger. If the ledger is not already assigned in Customizing, however, you will get an error message.



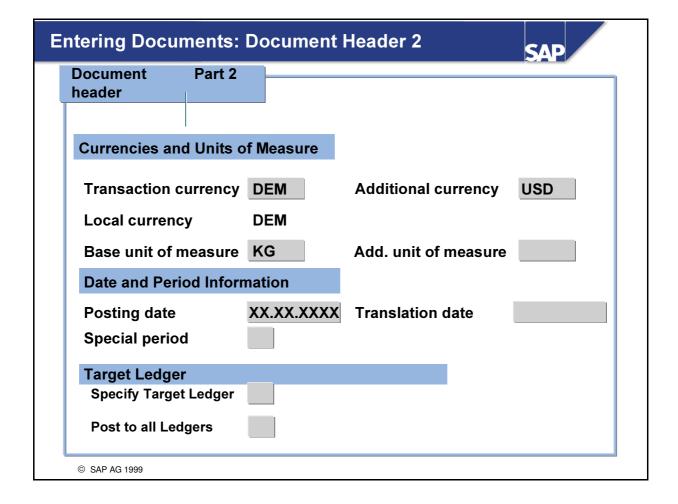
- The document type is a two-character alphanumeric key used to control how the document is read.
- Each document type is assigned to a document type group.
- The system assigns number ranges for these groups.
- The number assignment takes place separately for local documents and global documents.
- You must specify a company code (sub-object) for local documents. The document type (example P0) and number assignment must be valid for the company code.
- The sub-object for global documents is a global company.
- When maintaining number ranges, you have the following options:
  - Maintain intervals: create and change number ranges
  - Change status: a specific change to the number range status
  - Insert or delete the year



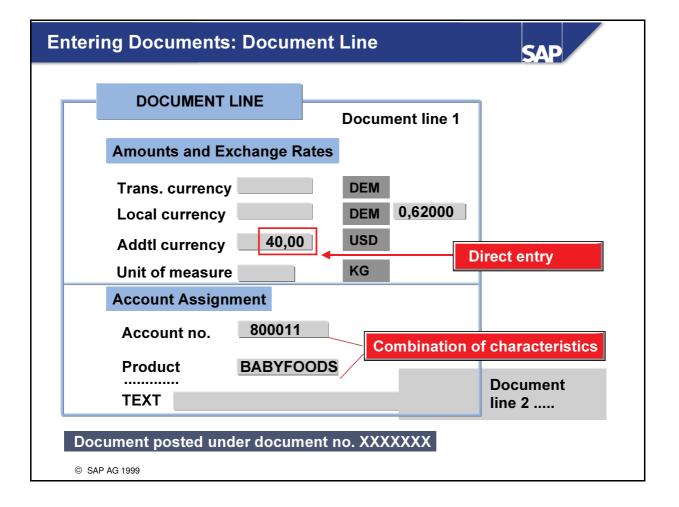
- For each record type, plan, actual and allocated actual and plan you can use up to 999 versions
- You can, for example use alternative plans. These can be complete alternatives (fully changed copies) or delta versions. A delta version would build simple adjustments to an original base version and both totaled together would deliver the new variant
- Alternative versions would be used mainly in planning or for allocations
- Postings arising from the other systems through the integration are always in version 1.
- Adjustment postings can be made on this basic version at a level which goes beyond the legal entity (company code) appropriate, for example for subgroups or preconsolidated results.



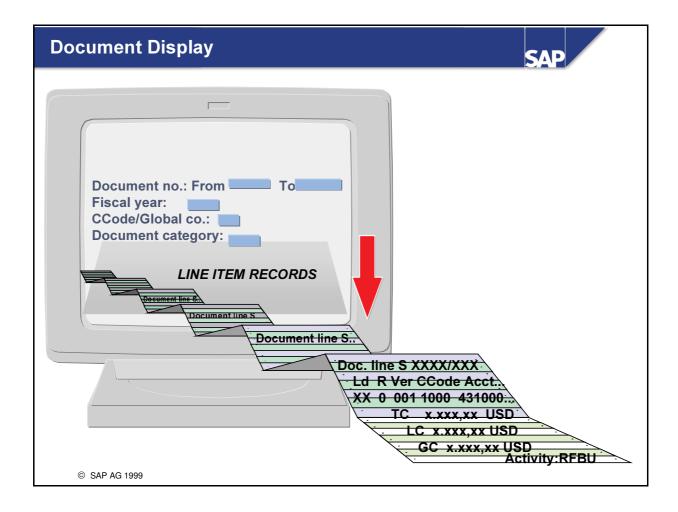
- Instead of having to use or remember the original database tables for some FI-SL applications, like direct data entry and summary view, "you can cut these down to size" by creating a User Table which just lists only those fields you need to see or enter values for in a particular sequence and use this `View` for the specific transaction.
- This reduces entry time, minimizes errors in choosing wrong fields and provides you with a comfortable overview of just that information you need to have in order to carry on with your processing.



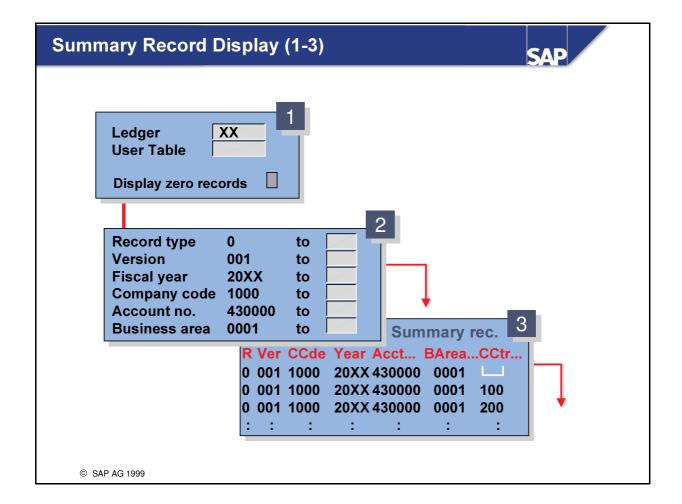
- You can enter an additional currency in addition to the transaction currency.
- You can also specify a unit of measure and an additional unit of measure.
- The periods for the ledger update are determined from the posting date.
- You can also enter data for a special period. (If you want to post to a special period, the posting date must be in the last normal period of the fiscal year.)
- You can specify a translation date to determine a specific exchange rate from the exchange rate table. The default value is the posting date.
- If required, enter a ledger for master data validation. The system uses the ledger you enter here to determine which chart of accounts is used to validate the master data (especially the Account dimension). The chart of accounts is defined at the ledger/company code level or at the ledger/global company level. If you do not enter a ledger, the system uses the chart of accounts of the local company code. For global ledgers, the system uses the chart of accounts of the company code assigned to the global company.



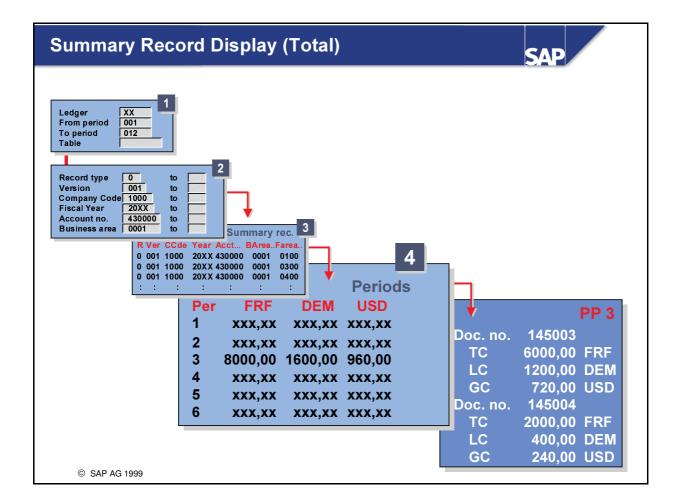
- For each document line, you can enter the amounts, the account assignments (characteristics and/or combinations of characteristics), and explanatory text.
- The exchange rates are taken from the exchange rate table and can be changed if required.
- For a document line with a negative amount/quantity, you must enter the minus (-) sign after the amount.
- When you enter a document, you can use the various Help functions (for example, holding or releasing account assignment characteristics, scrolling forwards or backwards between document lines).
- After you post the document, the system will display the document number.



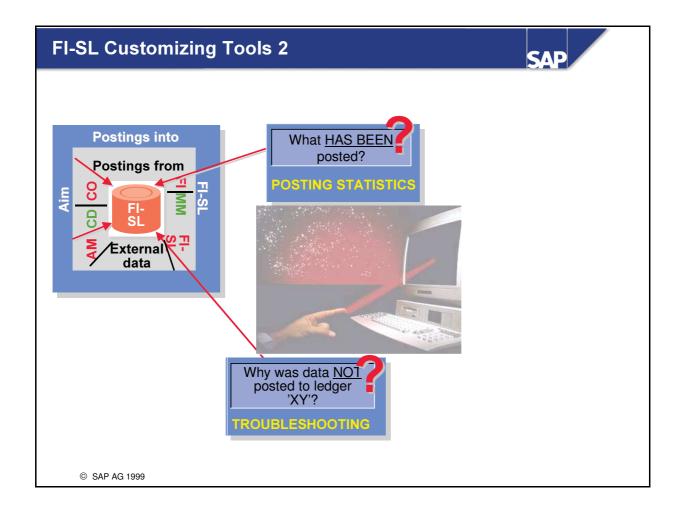
- Using the document number, you can display the relevant line items at any time.
- By entering the document number, the document with the line items from the corresponding table (for example, ZZSLA) is called up. If you enter a document number interval, you can call up several documents.
- The documents are called up for a company code or a global company in a ledger.
- You can enter a user table (or a summary table). If you do not do this, all the fields in the table contained in the ledger will be displayed.
- The document category defines the origin of the document. Possible values include:
  - B Documents from accounting
  - K Documents from controlling
  - G Documents from FI-SL for global postings
  - L Documents from FI-SL for local postings
  - R Rollup documents
  - S Documents assigned an FI-SL document number
  - W Documents which are transferred to FI-SL via the RW document



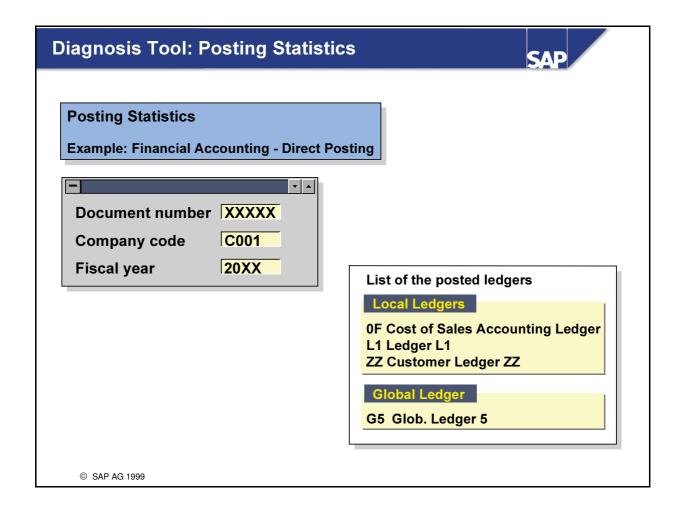
- Summary record display includes various levels:
  - Entering the ledger and the period(s)
  - Restricting the key fields for which you want to display the summary records
  - Selecting the summary records for period display



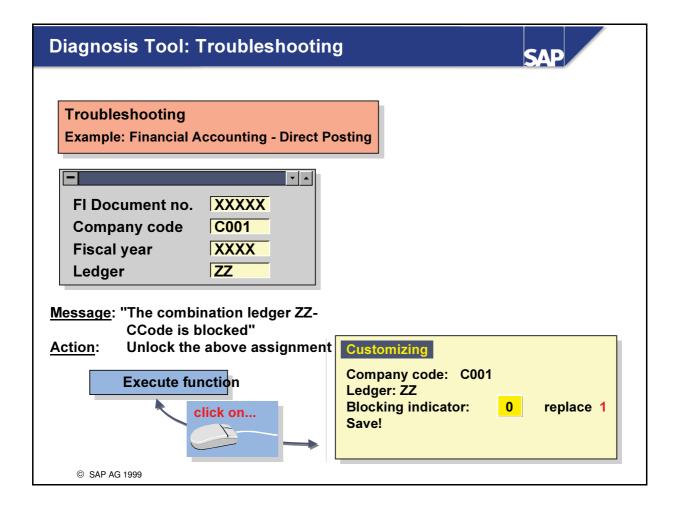
- Summary record display includes various levels:
  - 1. Entering the ledger and the period(s)
  - 2. Restricting the key fields for which you want to display the summary records
  - 3. Selecting the summary records for period display AND
  - 4. Selecting a period for displaying the line item documents
- By clicking on a certain document, you can display the original document.



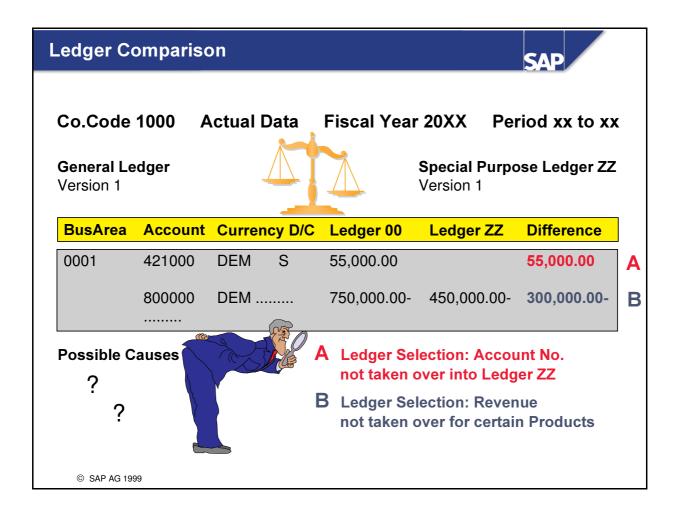
- To help you in the analysis of the postings you have made the FI-SL Customizing Tools include:
  - Posting Statistics and Troubleshooting



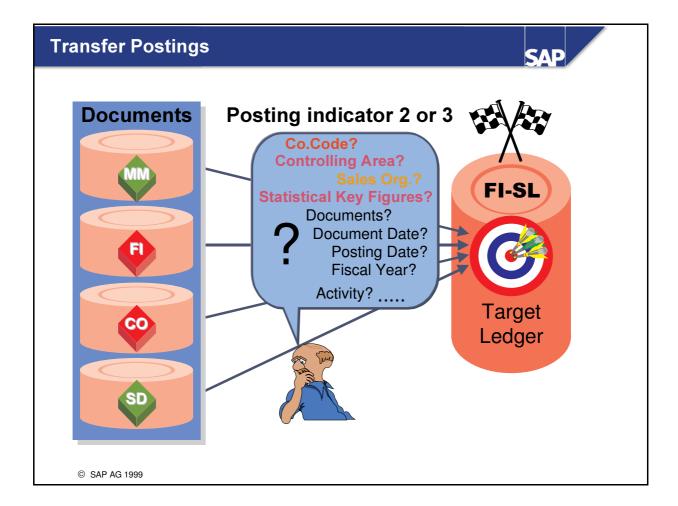
■ If you entered documents from FI, FI-SL, CO, MM, SD, AM or from an external system, you can call up a check list of the ledgers that were updated.



■ Sometimes one or more ledgers are not updated by a posting activity, although the ledger was supposed to be updated. Using troubleshooting, you can determine the cause for this and if required, you can directly call up the corresponding customizing transaction to add missing entries or correct entries containing errors.



- You can compare the transaction data stored in any FI-SL Ledger with those in the General Ledger.
- The selection entries for the comparison is made on the basis of version, record type, Company Code, Business Area(s), Account(s) and Debit/Credit Indicator. The comparison period specified is for a period or a range of periods in a particular fiscal year.
- The detailed Account Comparison can be made for:
  - G/L Account / G/L Account
  - G/L Account / Corporate Account or
  - G/L Account / Alternative Account
- Should there be differences you can drill down to a period overview of these.



- With FI-SL's transfer programs, you can transfer data from the FI, CO, MM and SD systems into the FI-SL System
- Together with the organizational elements (Company code, Controlling area..), you enter information relevant for the documents you wish to transfer (e.g. period, document date, posting date, activity, document numbers etc.)
- Target Ledger: If you have assigned more than one ledger in Customizing and are set to 'Follow-up posting,' but only want to post to one ledger in this run, you can specify your target ledger.
- However, if this ledger has not already been assigned in Customizing, you will get an error message.

## **Through Postings And Adjustments: Summary**





- You have been made familiar with the online and transfer postings can be made to FI-SL from another SAP module
- You know how to set up master data for characteristics to be used for postings within the FI-SL system
- You are able to use the FI-SL direct entry function
- You are able to create a user table for FI-SL applications
- You know how to access and view line items and summary records in FI-SL
- You can use the FI-SL diagnostic tools

## **Exercises**



**Unit: Through Postings and Adjustments** 

**Topic: FI-Postings** 



At the conclusion of this exercise, you will be able to:

- Perform General Ledger account postings and Check the results in FI-SL
- In the case of revenue postings to the Lines of Business set up master data for same



To populate the FI-SL ledgers, overhead postings and revenues need to be posted from the feeder system into FI-SL

Prior to making revenue postings to the Lines of Business, master data for these have to be entered into a value table

#### 1-1 Postings from FI

To perform G/L Account postings use the following,

Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst SAPR/3 System  $\rightarrow$  Accounting  $\rightarrow$  Financial Accounting  $\rightarrow$  General Ledger  $\rightarrow$  Document Entry  $\rightarrow$  GL Account Posting

If you wish you could right click on the mouse and add this transaction to your favorites

1-1-1 Expense Postings to Functional Areas Admin, Sales and R&D

*Company:* **ACXX** (xx = your group number)

Header entries:

Document and posting date: Current Date

Currency: USD

Use the Account assignment model (>Acct. assignmt model) **GL-SL01** to perform the posting. You then only have to enter the Cost Centers (in **bold** type) to complete the posting lines. To access your model first enter the date in the basic data screen then *select environment*—*complex posting* 

PK	Account	Taxcode	Amount	<b>Cost Center</b>
40	420000		1,000.00	T-A20AXX
40	420000		2,000.00	T-A20BXX
40	420000		3,000.00	T-A20EXX
40	421000		7,000.00	T-A20AXX
40	421000		8,000.00	T-A20BXX
40	421000		9,000.00	T-A20EXX
40	430000		1,000.00	T-A20AXX
40	430000		2,000.00	T-A20BXX
40	430000		3,000.00	T-A20EXX
40	431000		1,000.00	T-A20AXX
40	431000		2,000.00	T-A20BXX
40	431000		3,000.00	T-A20EXX
40	472000	V0	4,000.00	T-A20AXX
40	472000	V0	5,000.00	T-A20BXX
40	472000	V0	6,000.00	T-A20EXX
40	476000	V0	7,000.00	T-A20AXX
40	476000	V0	8,000.00	T-A20BXX
40	476000	V0	9,000.00	T-A20EXX
Offs	et Posting:			

#### **Offset Posting:**

50	399999	V0	81,000.00
----	--------	----	-----------

#### 1-1-2 Document Display in FI

Perform a Document Display for this posting in FI and call up the Accounting Documents. Check to see if your posting has entered the FI-SL system by choosing the document type 'Spec. Purpose Ledger' and have a look at the Line Item Posting for your Ledger.



Note down here the original accounting document number and the FI-SL document number

Accounting document number:	
FI-SI document number:	



The lines of business you will create, will be used for posting to in the Customer Invoice postings and for postings later within FI-SL

To define the new lines of business use the following,

Verify that the new field has been established in GLU! and is linked to table T830a. Sine the table zzslt was just created with zzlob, field will not be associated until after table zzslt installation

The transactions "Enter FI-SL Document (local)" and "Enter FI-SL

Document (global)" are always validated against table GLU1. Master data entries for table GLU1 must therefore exist in the master data table (T800D).

If the master data table only contains entries for your own FI-SL database table, master data validation will not take place when you enter local or global FI-SL documents.

If, for example, you add a new field "License plate number" (RCARNR) to your FI-SL table, the system validates this new field against the master data table. The entry GLU1 RCARNR must be maintained in the master data

#### Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  SAP R/3 System  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$ Environment  $\rightarrow$  Intgr. Master Data  $\rightarrow$  Create

Enter in SPL Structure GLU1 and field RZZLOB

Below add a one year date range

In the dialogue box that appears enter your ACXX company code

Create and save the following Lines of Business: (XX= your Group number)

Line of Business Description

PTROXX1	Petroleum 1 Group XX
PTROXX2	Petroleum 2 Group XX
CHEMXX1	Chemical 1 Group XX
CHEMXX2	Chemical 2 Group XX
COMMXX1	Communication 1 Group XX
COMMXX2	Communication 2 Group XX
PHRMXX1	Pharmaceutical 1 Group XX
PHRMXX2	Pharmaceutical 2 Group XX

1-1-4 Revenue Postings to Line of Business and Products (Customer Invoice posting)

To make Customer Invoice postings use the following,

Menu Path

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  SAP R/3 System  $\rightarrow$  Financial Accounting  $\rightarrow$  Accounts receivable  $\rightarrow$  Document entry  $\rightarrow$  invoice

Enter the following basic entries:

Set Company code if needed:

Company Code: ACXX (XX= your Company Code).

Customer:

Invoice Date: Current date

Currency: USD
Amount: 240,000

Then call up the Account Assignment model (*Environment*  $\rightarrow$  *Complex posting*) Select Account assignment model button and enter model:**DR-SL02** to post the following lines:

You only need to enter the appropriate Line of Business (XX = your group number) to complete them

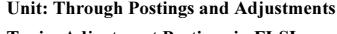
PK	Account no.	Tax Code	Amount	BusAREA	Mat.no.	LOB
50	800200	A0	10,000	0001	T-IC-F1001	PTROXX1
50	800200	A0	10,000	1500	T-IC-F1002	CHEMXX1
50	800200	A0	10,000	8000	T-IC-F1003	COMMXX1
50	800200	A0	10,000	9000	T-IC-R2007	PHRMXX1
50	800300	A0	20,000	0001	T-IC-F1001	PTROXX1
50	800300	A0	20,000	1500	T-IC-F1002	CHEMXX1
50	800300	A0	20,000	8000	T-IC-F1003	COMMXX1
50	800300	A0	20,000	9000	T-IC-R2008	PHRMXX1
50	800400	A0	30,000	0001	T-IC-F1001	PTROXX1
50	800400	A0	30,000	1500	T-IC-F1002	CHEMXX1
50	800400	A0	30,000	8000	T-IC-F1003	COMMXX1
50	800400	A0	30,000	9000	T-IC-R2009	PHRMXX1

Save your posting.

View the FI-Document in the same way as in 1-1-2 (here the Customer
Invoice document number) and note down here the document numbers:
Accounting document number:
FI-SL document number:

# **Exercises**





**Topic: Adjustment Postings in FI-SL** 

## **Document and Summary Display**

At the conclusion of this exercise, you will be able to:

- Create Ledger Version for Adjustment Actual Postings
- Create User Table for Data Entry
- Perform Adjustment Postings
- Display Single Items and Summary Records



On occasion, it is necessary to make adjustment postings in FI-SL by Line of Business (ZZLOB) in order to quickly adjust revenues by industry sector.

The Direct Entry functionality in FI-SL will be analyzed for this purpose

- 2-1 Adjustment Postings in FI-SL
  - 2-1-1 Create a Version 2 for Actual Postings in FI-SL

Menu path:

SAP Easy Access → Activity Group: SL:Reporting\_Analyst → IMG → Customizing

SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Actual Posting $\rightarrow$ Maintain Actual Versions

Ledger	Version	Activate Version	Version Description
Your ledger	2	X	Version 2 Adjustments

### 2-1-2 User Table for FI-SL Adjustment Posting

Menu path:

SAP Easy Access  $\rightarrow$  Activity Group SL: Reporting\_Analyst  $\rightarrow$  IMG  $\rightarrow$  Customizing SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Master Data  $\rightarrow$  Maintain User Tables

User Table: GXX-UTAB Table: GLU1

(XX-your Group number)

Fields in the User Table:

Field nameNo.

RACCT 1

RBUSA 2

RMATNR 3

**RZZLOB** 4

### 2-1-3 Adjustment Postings in FI-SL

### Menu path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SD: Reporting$ 

**Initial Screen Entries:** 

Company Code: ACXX

Document type: A2

Version: 2

Posting date: Current date

Additional currency: **USD** 

Enter target ledger: Your Ledger

User table: GXX-UTAB

Item Screen: Enter the following lines:

Acct.	Busa	Mat. no.	Lob	Amount (USD)
800200	0001	T-IC-F1001	PTROXX1	1,000-
800200	1500	T-IC-F1002	CHEMXX1	1,000-
800200	8000	T-IC-F1003	COMMXX1	1,000-
800200	9000	T-IC-R2007	PHRMXX1	1,000-
800300	0001	T-IC-F1001	PTROXX1	2,000-
800300	1500	T-IC-F1002	CHEMXX1	2,000-
800300	8000	T-IC-F1003	COMMXX1	2,000-
800300	9000	T-IC-R2008	PHRMXX1	2,000-
800400	0001	T-IC-F1001	PTROXX1	3,000-
800400	1500	T-IC-F1002	CHEMXX1	3,000-
800400	8000	T-IC-F1003	COMXX1	3,000-
800400	9000	T-IC-R2009	PHRMXX1	3,000-

Note down here the document number posted:

Document number for FI-SL:

### 2-1-4 Document Display

### Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SD: Reporting\_Analyst 
ightharpoonup SD: Polysian Polysia$ 

View the documents that you noted from your FI-GL (1-1-2), FI-DR(1-1-4) and FI-SL (1-2-3) postings, and, in the case of your FI-postings, drill down to view the original documents.

### 2-1-5 Summary Display

### Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup Special purpose ledger 
ightharpoonup Actual posting 
ightharpoonup Display totals$ 

View the summary records that you recorded from your FI-GL (1-1-2), FI-DR(1-1-4) and FI-SL (1-2-3) postings, drill down to the Single Items and, in the case of your FI-postings, drill down to view the original documents.

# **Exercises**



**Unit: Through Postings and Adjustments** 

**Topic: FI-SL Diagnostic Tools to check postings** 

### **Ledger Comparison**

### **Troubleshooting**

At the conclusion of this exercise, you will be able to:

- Check Postings with Diagnostic Tools
- Compare Summary Records in an FI-SL Ledger with the General Ledger
- Perform a Diagnosis for records not posted



To assist in checking postings to FI-SL the system provides a variety of diagnostic tools. These should be used to verify how consistent your master data set-up has catered for the nature of postings you have made and, in the case of missing results, provide the reasons for these

### Menu path for diagnostics:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  IMG $\rightarrow$ SAP Reference IMG $\rightarrow$ Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Perform diagnosis

Alternative path from the FI-SL Application menu:  $Tools \rightarrow Diagnosis$ 

3-1 Diagnosis Tool: Posting Statistics:

Check the ledgers posted for

The FI-GL/DR postings: Documents noted earlier

The FI-SL direct entry posting: **Document posted earlier** 

3-2 Ledger Comparison

Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  IMG $\rightarrow$ SAP Reference IMG $\rightarrow$ Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Compare G/L Transaction Figure Ledger with FI-SL Ledger

Check the postings you made earlier in FI to your ledger with the postings made to the General Ledger.

Make note of any differences.

Selection:

Base Ledger:

Version: 1

0

Your Company Code ACXX

Current fiscal year and period

Comparison Ledger: Your Ledger and Version 1

Accounts to check: 140000

420000,421000,430000,431000,472000,476000

800200,800300,800400

399999

Note down and give a reason for any difference(s) you find:

Acct. no. Amount (your ledger) Amount in G/L Reason for difference

### 3-3 Troubleshooting



Choose your Ledger in FI-SL Customizing (Master Data Maintenance) and set the Indicator for the Assignment to your Company Code to '0' (blocked for posting). Save your entry.

Execute a General Ledger Account Posting for your company code: Fast entry template DEMO2:

 $SAP\ Easy\ Access \rightarrow Activity\ Group\ SL:Reporting\_Analyst \rightarrow General\ Ledger \rightarrow Document\ entry \rightarrow GL\ Account\ posting$ 

Enter the Doc date: Todays Date and select

Environment $\rightarrow$ Complex posting $\rightarrow$ GL item fast entry

Settings→Entry template: Select DEMO2

PK	Account	Tax Code	Amount	Cost Center
40	465000		5000	T-A20EXX (XX = Group No.)
50	399999	V0	5000	

Note down your FI Document Number here:

FI Document Number:

Use the FI-SL Diagnostics Tool 'Posting statistics' to view the Ledger(s) which have been posted to.

If your Ledger is not listed, perform the FI-SL Diagnostic 'Troubleshooting'.

Read the system message, enter the FI-SL Customizing from there and set the indicator for postings to your Ledger/ Company Code Assignment back to '1'. Save your entry.

# **Exercises**



**Unit: Through Postings and Adjustments** 

**Topic: Transfer Postings** 



At the conclusion of this exercise, you will be able to:

- Prepare FI-SL for a transfer posting
- Execute the transfer of an FI Document to an FI-SL Ledger



Before the implementation of FI-SL is complete, certain application areas like FI and SD go live. It is therefore necessary to transfer existing documents from outside into FI-SL

### 4-1 Transfer Posting

For the activity RFBU chosen for your Ledger/Company code combination set the posting indicator to '3' (posting online and at subsequent possible).

Perform a posting test (subsequent posting) for an RFBU posting to your company code for the current period/year.

Execute a transfer posting first in test mode. Then remove the Test Run setting and rerun.

Enter the FI document number you noted above in 5-1

### Menu path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup Special\ purpose$   $ledger 
ightharpoonup Periodic\ processing 
ightharpoonup Data\ transfer 
ightharpoonup Financial\ accounting$ 

Selection: your company code-ACXX

Current Fiscal year and period

Transaction: RFBU

Document origin: BKPF

Document number from Exercise 5-1

Target ledger: Your ledger (AA...RR)

After you have performed the transfer posting , check the result with the FI-SL Document Display.



**Unit: Through Postings and Adjustments** 

**Topic: FI-Postings** 

### 1-1 Postings from FI

To perform G/L Account postings use the following,

### Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst $\rightarrow$  Accounting  $\rightarrow$  Financial Accounting  $\rightarrow$  General Ledger $\rightarrow$ Document Entry  $\rightarrow$  G/L Account posting

### 1-1-1 Expense Postings to Functional Areas Admin, Sales and

R&D

Set Company Code ACXX

Company: ACxx (xx = your group number)

Header entries:

Document and posting date: Current Date

Currency: USD

### Environment →Complex Posting→Account Assignment Model

Use the Account assignment model (>Acct. assignmt model) **GL-SL01** to perform the posting. You then only have to enter the Cost Centers (in **bold** type) to complete the posting lines:

PK	Account	Taxcode	Amount	<b>Cost Center</b>
40	420000		1,000.00	T-A20AXX
40	420000		2,000.00	T-A20BXX
40	420000		3,000.00	T-A20EXX
40	421000		7,000.00	T-A20AXX
40	421000		8,000.00	T-A20BXX
40	421000		9,000.00	T-A20EXX
40	430000		1,000.00	T-A20AXX
40	430000		2,000.00	T-A20BXX
40	430000		3,000.00	T-A20EXX
40	431000		1,000.00	T-A20AXX
40	431000		2,000.00	T-A20BXX

40	431000		3,000.00	T-A20EXX
40	472000	V0	4,000.00	T-A20AXX
40	472000	V0	5,000.00	T-A20BXX
40	472000	V0	6,000.00	T-A20EXX
40	476000	V0	7,000.00	T-A20AXX
40	476000	V0	8,000.00	T-A20BXX
40	476000	V0	9,000.00	T-A20EXX
Offse	et Posting:			
50	399999	V0	81,000.00	

### 1-1-2 Document Display in FI

Perform a Document Display for this posting in FI and call up the Accounting Documents. Check to see if your posting has entered the FI-SL system by choosing the document type 'Spec. Purpose Ledger' and have a look at the Line Item Posting for your Ledger.

Note down here the original accounting document number and the FI-SL document number

Accounting document number:	
FI-SL document number:	

### 1-1-3

1-1-4 Revenue Postings to Business Lines and Products (Customer Invoice posting)

To make Customer Invoice postings use the following,

### Menu Path:

SAP Easy Access → Activity Group SL:Reporting Analyst→ Accounting  $\rightarrow$  Financial Accounting  $\rightarrow$  Accounts receivable  $\rightarrow$  Postings  $\rightarrow$  invoice

Header entries:

Document and Posting date: **Current date** 

Doc. Type: DR

Company Code: **ACXX** (XX= your Company Code)

**USD** Currency:

Enter the following document lines:

PK	Customer	Amount	Calculate Tax	Tax code
01	T-F20A <b>XX</b>	240,000	X	A0 ( $XX = your group no.$ )

Then call up the Account Assignment model (>Act assgnmt model) **DR-SL02** to post the following lines:

You only need to enter the appropriate Line of business (XX = your group number) to complete them

PK	Account no.	Tax Code	Amount	BusAREA	Mat.no.	<b>Business Line.</b>
50	800200	A0	10,000	0001	T-IC-F1001	PTROXX1
50	800200	A0	10,000	1500	T-IC-F1002	CHEMXX1
50	800200	A0	10,000	8000	T-IC-F1003	COMMXX1
50	800200	A0	10,000	9000	T-IC-R2007	PHARMXX1
50	800300	A0	20,000	0001	T-IC-F1001	PTROXX1
50	800300	A0	20,000	1500	T-IC-F1002	CHEMXX1
50	800300	A0	20,000	8000	T-IC-F1003	COMMXX1
50	800300	A0	20,000	9000	T-IC-R2008	PHARMXX1
50	800400	A0	30,000	0001	T-IC-F1001	PTROXX1
50	800400	A0	30,000	1500	T-IC-F1002	CHEMXX1
50	800400	A0	30,000	8000	T-IC-F1003	COMMXX1
50	800400	A0	30,000	9000	T-IC-R2009	PHARMXX1

Save your posting.

View the FI-Document in the same way as in 1-1-2 (here the Customer
Invoice document number) and note down here the document numbers:

Accounting document number:	
FI-SL document number:	



**Unit: Through Postings and Adjustments** 

**Topic: Adjustment Postings in FI-SL** 

**Document and Summary Display** 

2-1 Adjustment Postings in FI-SL

2-1-1 Create a Version 2 for Actual Postings to your ledger in FI-SL

Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SAP$   $Reference\ IMG 
ightharpoonup Financial\ Accounting 
ightharpoonup Special\ Purpose\ Ledger$   $ightharpoonup Actual\ Posting 
ightharpoonup Maintain\ Actual\ Versions$ 

Ledger	Version	Activate Version	Version Description
Your ledger	2	X	Version 2 Adjustments

2-1-2 User Table for FI-SL Adjustment Posting

Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  IMG  $\rightarrow$  SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings $\rightarrow$ Master Data  $\rightarrow$  Maintain User Tables

Maintain user tables

In this step, you can create or maintain user tables.

If you do not use most of the fields (dimensions) in a table, you can create your own user table. This user table contains only the dimensions that you need for working in the Special Purpose Ledger system.

Actions

- 1. Select "Edit" -> "New entries" in the menu bar.
- 2. Enter the name of the user table that you want to create and the name of the table that contains the fields that you want to use for your user table.
- 3. Enter a description for the user table, if required.
- 4. Under the "Navigation" group heading, select the "User table fields" button.
- 5. On the following screen, select "New entries" and enter the names of the fields that you want to include in your new user table.

6. If you want the user table fields to appear in a certain order, enter numbers that correspond to the field sequence in the "No." field.

For example, if you want the field "Account" to appear first in your user table, type 1 in the "No." field next to the respective account field.

7. To create your user table, select "Table view" -> "Save". New Entries:

Field nameNo.

RACCT 1

RBUSA 2

RMATNR 3

**RZZLOB** 4

### 2-1-3 Adjustment Postings in FI-SL

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  Accounting  $\rightarrow$  Financial Accounting  $\rightarrow$  Special purpose ledger  $\rightarrow$  Actual posting  $\rightarrow$  Local documents  $\rightarrow$  Enter

**Initial Screen Entries:** 

Company Code: ACXX

Document type: A2

Version: 2

*User table:* **GXX-UTAB** 

Additional currency: USD

Posting date: Current date

Specify target ledger: Your Ledger

Enter document lines as indicated in the exercise.

Note down the document number posted.

**Document Display** 

Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst $\rightarrow$  Accounting  $\rightarrow$  Financial Accounting  $\rightarrow$  Special purpose ledger  $\rightarrow$  Actual posting  $\rightarrow$  Local documents  $\rightarrow$  Display

View the documents that you noted from your FI-GL, FI-DR and FI-SL postings, and, in the case of your FI-postings, drilldown to view the original documents.

Selection criteria:

Document number from xxxxx to xxxxx

Fiscal Year: Current Year

Ledger: Your Ledger

Company Code: Your Company Code ACXX

Depending on the document numbers you have noted and the origin of the posting, you have a choice of the document categories: \* = any document type, W = documents from the RW document or L =FI-SL local documents.

### 2-1-4 Summary Display

### Menu Path:

 $SAP\ Easy\ Access o Activity\ Group\ SL: Reporting\_Analyst o$  $Accounting\ o Financial\ Accounting\ o\ Special\ purpose\ ledger\ o Actual\ posting\ o\ Display\ totals$ 

View the summary records that you recorded from your FI-GL, FI-DR and FI-SL postings, drill down to the Single Items and, in the case of your FI-postings, drilldown to view the original documents.

Ledger: AA (...RR)

From Period: Current Period

To Period: Current Period

User table: leave blank

Record type: **0** 

Version: **001** 

Fiscal year: Current Year

Company code: ACXX

Account number: Those you have posted to; single value or interval.

From the Overview screen select your summary record with double-click and as appropriate, double-click again to drill down from the Single Item to the original document.



**Unit: Through Postings and Adjustments** 

Topic: FI-SL Diagnostic Tools to check postings Ledger Comparison Troubleshooting

Menu path for diagnostics:

Menu Path:

 $SAP\ Easy\ Access 
ightarrow Activity\ Group\ SL: Reporting\_Analyst 
ightarrow IMG 
ightarrow SAP$   $Reference\ IMG 
ightarrow Financial\ Accounting\ 
ightarrow Special\ Purpose\ Ledger\ 
ightarrow\ Tools\ 
ightarrow$   $Perform\ diagnosis$ 

Alternative path from the FI-SL Application menu:  $Tools \rightarrow Diagnosis$ 

3-1 Diagnosis Tool: Posting Statistics:

Check the ledgers posted for

• The FI-GL/DR postings: Documents noted earlier

Origin of original document:

x Financial accounting

Posting status

x Direct posting

Press Button 'Direct posting stat.'

Document number: xxxxx

Fiscal year: Current year

Company code: Your company code ACXX

• The FI-SL direct entry posting: Document posted earlier

Origin of original document:

x Special Purpose Ledger (FI-SL)

Posting status

x Direct posting

Press Button 'Direct posting stat.'

Document number: xxxxx

Fiscal year: Current year

Company code: Your company code ACXX

### 3-2 Ledger Comparison

### Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  IMG  $\rightarrow$  SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Compare G/L Transaction Figure Ledger with FI-SL Ledger

Compare G/L Transaction Figure Ledger with FI-SL Ledger

Check the postings you made earlier in FI for your company code in the current period and year to your ledger with the postings made to the General Ledger.

Make note of any differences.

Selection:

Base Ledger: 0Version: 1Your Company Code

Current fiscal year and period

Comparison Ledger: Your Ledger and Version 1

Accounts to check: 140000

420000,421000,430000,431000,472000,476000

800200,800300,800400

399999

Note down and give a reason for any difference(s) you find:

Acct. no.	Amount(your ledger) Amount in G/L	Reason for difference
140000		Not foreseen in the
399999		Ledger Selection rule
		activated for Activity
		RFBU selected for
		your Ledger/Co.Code
		combination
possibly:		
4xxxxx		Possibly used in the
8xxxxx		wrong combination
		with functional area /
		material number

# 3-3 Troubleshooting

FI document number: xxxxx

Company code: Your company code Acxx

Fiscal year: Current year Ledger: Your Ledger

Message: 'The combination Ledger (your Ledger) – company code ACXX is

blocked'

'Remove this assignment'

Double-click on 'Proceed' and change back the blocking indicator to 1 and save!



**Unit: Through Postings and Adjustments** 

**Topic: Transfer Postings** 

### 4-1 Transfer Posting

For the activity RFBU chosen for your Ledger/Company code combination set the posting indicator to '3' (posting online and at subsequent possible)

→ Change Ledger: Assign Activity

Activity FldMovement Post. ind. ......

RFBU FIXX 3

Perform a posting test (subsequent posting) for an RFBU posting to your company code for the current period/year.

Execute the transfer posting first in test mode.

After that remove the Test Run setting and rerun.

Enter the FI document number you noted above in 5-1.

### Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  Accounting  $\rightarrow$  Financial Accounting  $\rightarrow$  Special purpose ledger  $\rightarrow$  Periodic processing  $\rightarrow$  Data transfer  $\rightarrow$  Financial accounting

Selection: your company code

Current Fiscal year and period

Activity: **RFBU** 

Document origin: BKPF

Document number from Exercise 5-1:

Target Ledger: Your Ledger (AA...RR).

After you have performed the transfer posting, check the result with the FI- SL Document Display.

# Validations, Substitutions and Rules



### **Contents:**

- Examples of Validations and Substitutions
- Procedure
- Callup Points
- Rule Format: Operands, Logical Operators and Comparison Operators
- Formula Editor
- Validation and Substitution Steps
- Activation

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# Validations, Substitutions and Rules: Objectives





At the completion of this unit, you will

- be familiar with the most important parameters and essential functionality of FI-SL Validations and Substitutions
- You will learn how to use Validations and Substitutions and how to activate and execute both

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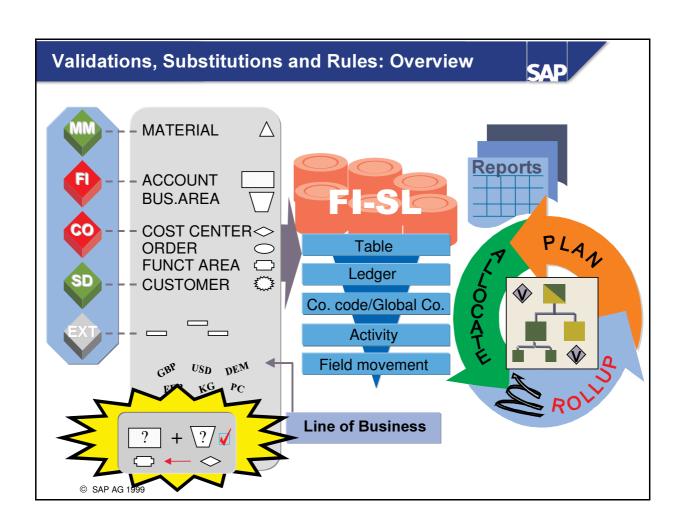
# Validations, Substitutions and Rules: Business Scenario

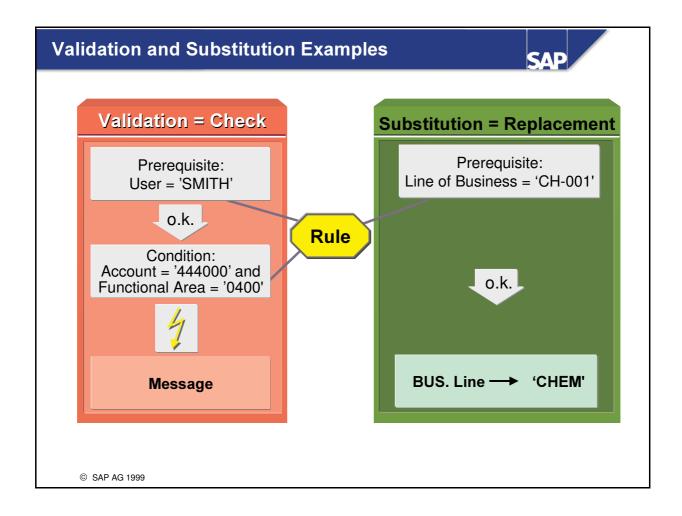




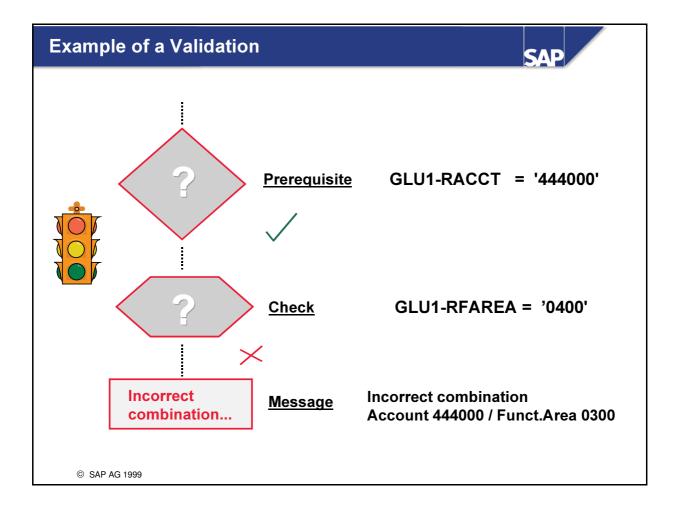
- Business Managers have to ensure that any adjustment postings made in FI-SL are restricted to the correct version and document type.
   Additionally, the correct combinations of Business Lines and revenues for special reports must feature in such postings.
- The same managers have decided to reorganize and regroup their Regional Business Lines into higher level Lines of Business and aggregate the revenues for special reports.
- To ensure the verification and consistency of such information entered, FI-SL Validation and Substitution facilities will be investigated, tested and enforced.

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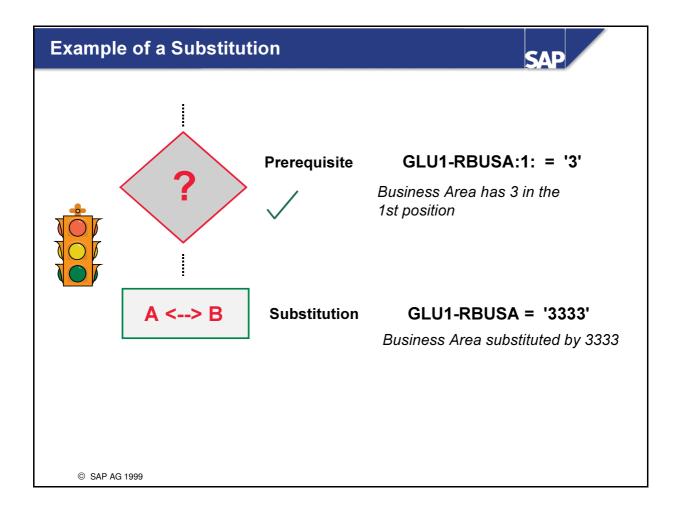




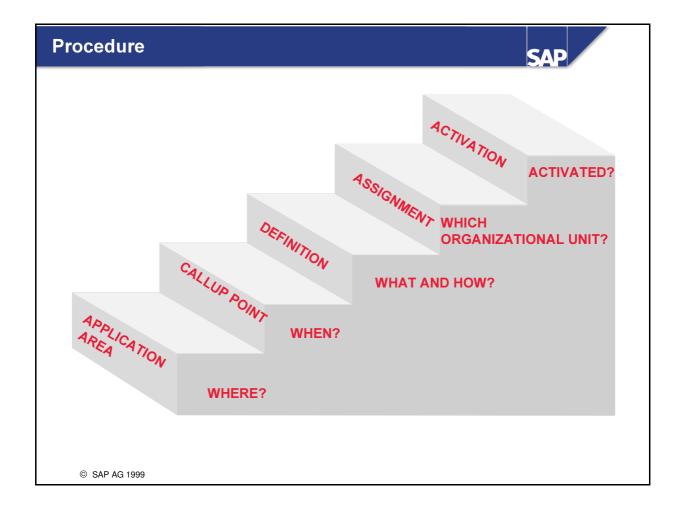
■ User-defined rules enable you to validate and substitute specific data as it is being entered into the system.



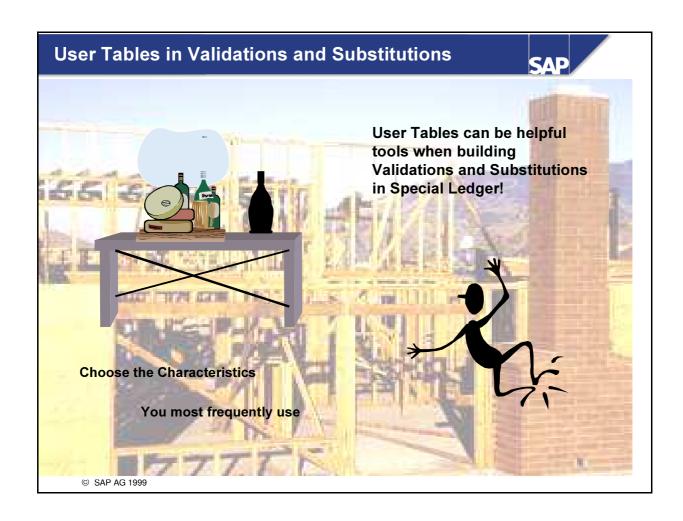
- Validation allows you to define your own individual checks for specific fields when a business transaction is being processed.
- A validation consists of three parts:
  - Prerequisite
  - Check
  - Message
- If the prerequisite is met (if it is TRUE), a check is performed.
- If the check statement is FALSE, the system returns a message.

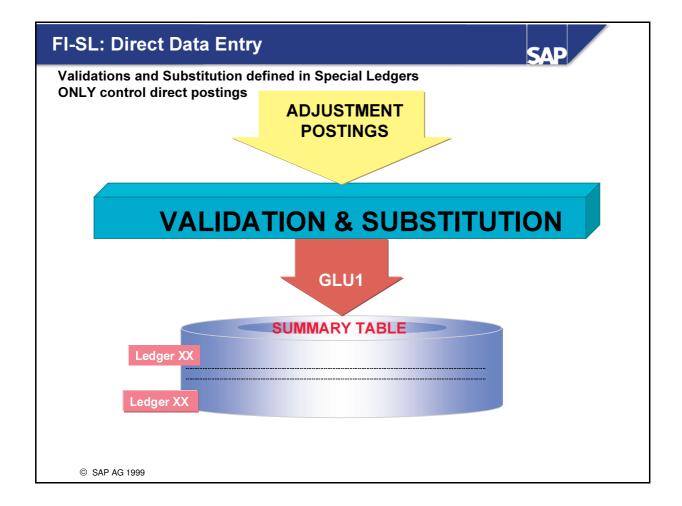


- Substitution allows you to define your own conditions for substituting specific fields.
- A substitution consists of two parts:
  - Prerequisite
  - Substitution
- If the prerequisite is met (if it is TRUE), the substitution is carried out.

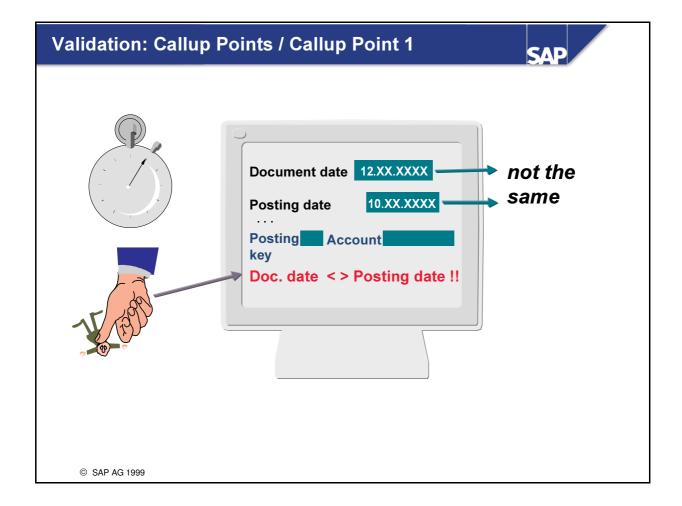


- You must complete the following steps to create a validation or substitution:
  - 1. Enter the application area in which the validation or substitution is called up.
  - 2. Select the correct callup point for the validation or substitution.
  - 3. Define the validation or substitution.
  - 4. Assign your validation or substitution to an organizational unit (for example, company code for FI, company code or global company for FI-SL, controlling area for CO) and
  - 5. Activate it.
- The fields that can be used in your validation or substitution are determined from the application area and the callup point. When you define your rules for the prerequisite and check statements, you can choose the fields that you want to use.

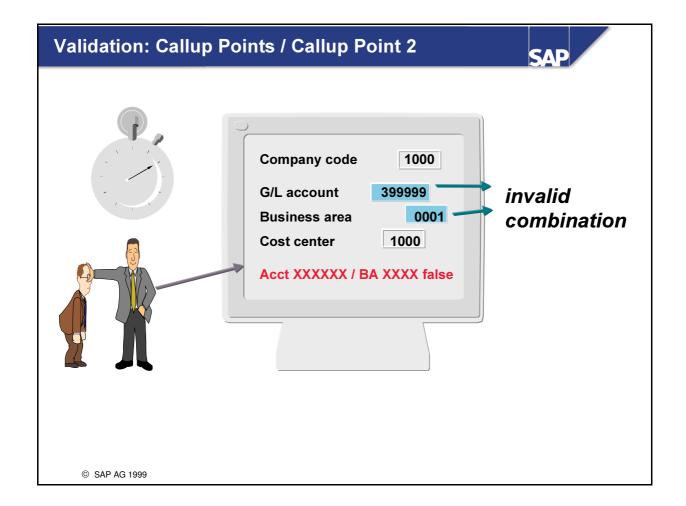




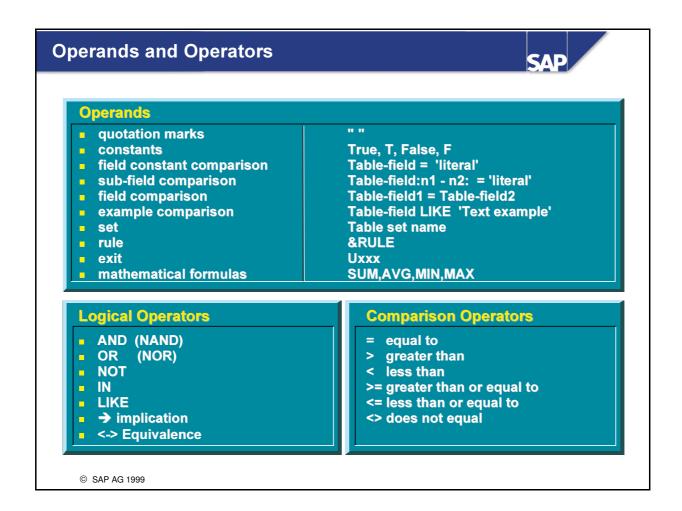
- This example shows how validations and substitutions are used in FI-SL.
- The validation / substitution can be used for a direct posting (adjustment posting).
- The fields in table GLU1 are used in this example.



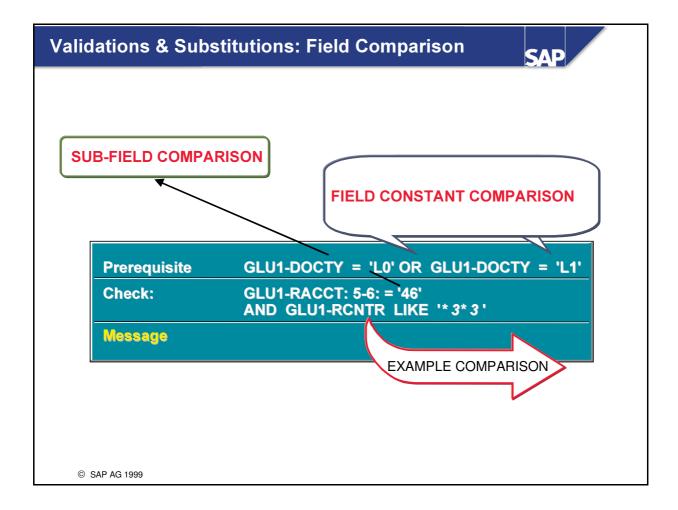
- The callup point tells you when the validation or substitution is performed.
- This example shows how data is validated in a G/L account assignment or FI-SL account assignment at callup point 1.
- Callup point 1 checks the fields in a document header.



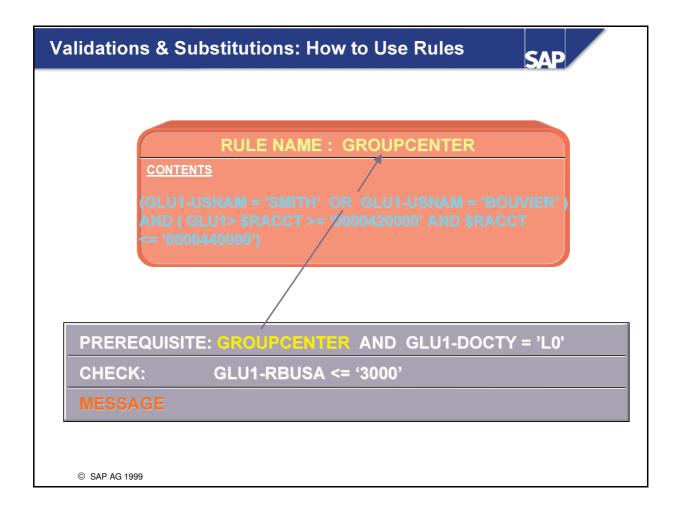
- Callup point 2 is used to check the fields in a document line for a G/L account posting or a FI-SL adjustment posting. The fields that are available at callup point 1 are also available for cross-checks.
- Example: Checking the account / business area combination.



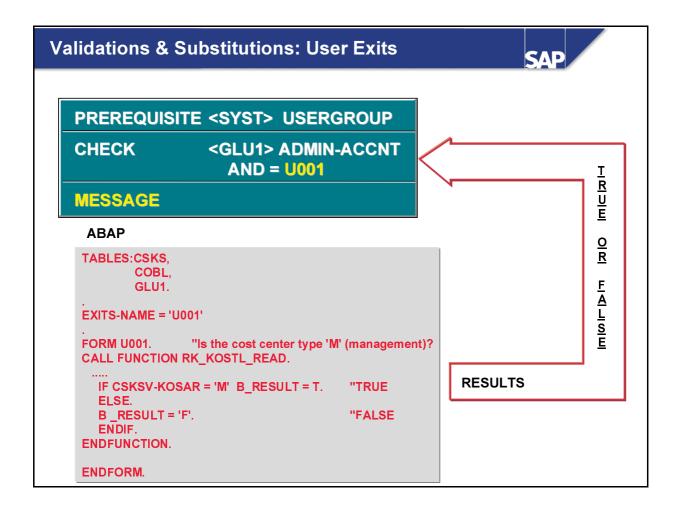
- The following elements are used to create rules for prerequisite statements (validation and substitution) and check statements (validation):
- Operands:
  - Logical operators (Boolean logic)
  - Comparison operators



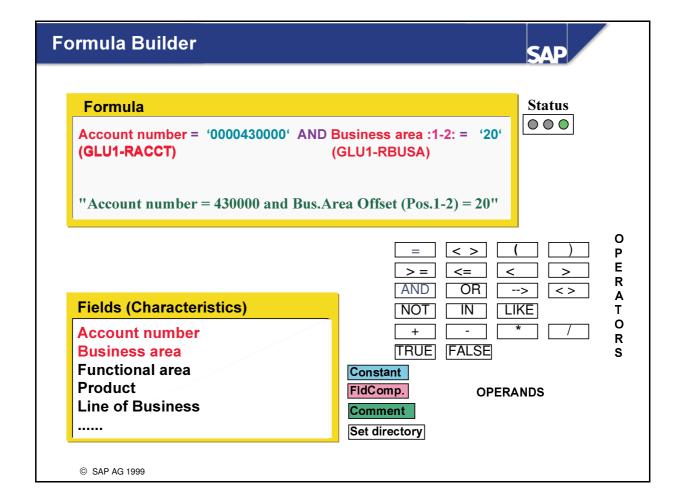
- There are four types of field comparison:
  - 1. Field constant comparison : <Table> \$field = 'literal'
  - 2. Sub-field comparison : <Table> \$fname:n1-n2 op 'fvalue'
    - :<Table> \$fname:n1- op 'fvalue'
    - :<Table> \$fname:n1: op 'fvalue'
    - n1: position of the first character in the interval to be compared
    - n2: position of the last character in the interval to be compared
    - n1: from the nth position in the field to the end of the field
    - n: the nth position
  - 3. Field comparison: <Table> \$field1 = <Table> \$field2
  - 4. Example comparison: Text example can be compared using the key word 'LIKE'.
- The symbol '\*' stands for any combination of characters; the symbol '+' stands for a single character.
  - Example: <GLU1> \$RCNTR LIKE '\*3\*3'" applies to the cost centers 33, 363, 32433.



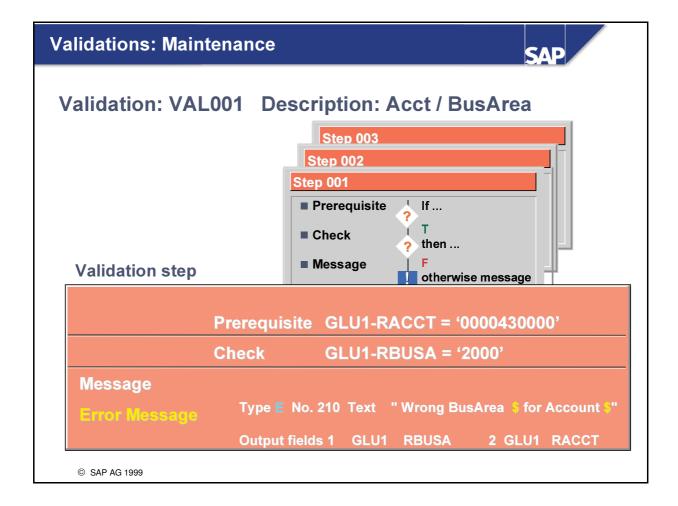
- A rule is a Boolean statement that is used in either a prerequisite, check or in another rule.
- If a Boolean statement is frequently used or if it contains complex logic, you can create a rule for it.
- You can take this rule from the rule list and use it in your validation or substitution.



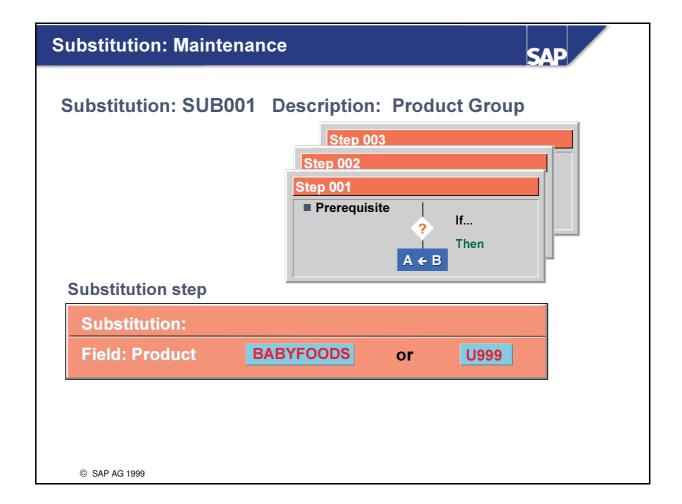
- User exits are form routines programmed by the user.
- If you want to use your own rule, you can use user exits to define prerequisites or checks for validating or substituting fields.
- Exit routines are created in a report. Each client has its own report. The form pools for the report are stored in table T80D.
- The above example shows how the system jumps from a validation routine (in the check statement) via the USER EXIT U001 to an ABAP report.
- The system checks the cost center master data for the cost center entered by the user.
- If a management cost center is used, the constant T'(= TRUE') is returned, otherwise the constant F'(= FALSE') is returned via the field 'B\_RESULT'.



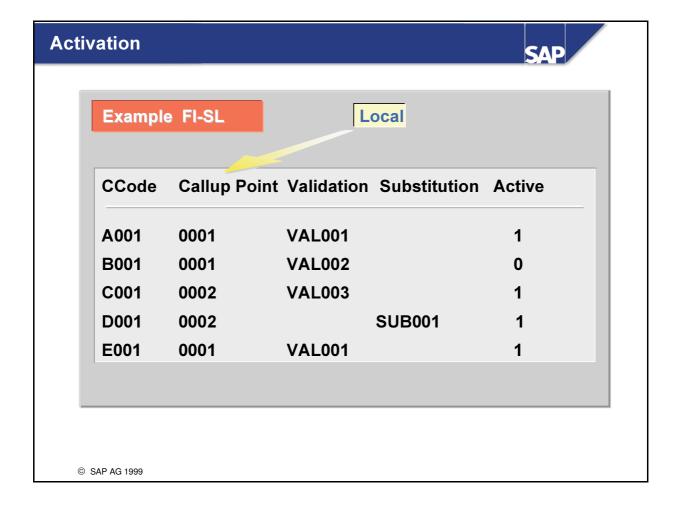
- The Formula Builder provides an easy-to-use interface for inputting arithmetical and logical expressions.
- Depending on the context for the formulation required, you are given buttons to press which provide Operands and Operators for logical expressions which have to be inserted in the formula
- Your entry is checked step by step for correct syntax including parentheses
  Depending on your entries the system will only allow you to dispose of the correct logical
  formulation to guarantee a fully correct statement. Errors in entering your rules are therefore scored
  out
- The use of technical names, as was the case in the past (tables and field names) is still supported, but here the options you can use are delivered using press buttons and texts. This enhances the comfort of handling a logic which is intrinsically technical.



- Each validation can contain up to 999 steps that each consist of a
  - prerequisite
  - check
  - · message.
- Prerequisites and checks contain the same fields and have the same field processing options.
- You can use a message that has already been defined or you can create a new message for the validation.
- You can include up to four fields in a message. The '\$' characters in the message are placeholders for the fields to be output.
- The messages to be output can have different levels of severity:
  - I = Information
  - W = Warning
  - E = Error (the user must correct the entry)
  - C = Cancel



- A substitution can also contain up to 999 steps.
- A substitution step consists of a :
  - prerequisite
  - substitution



- A validation / substitution is activated for each of the following:
  - an ORGANIZATIONAL UNIT (in FI-SL: Company code or global company)
  - a CALLUP POINT (in FI-SL: 0001 (document header) or 0002 (document line))
  - A validation or substitution can be valid for several company codes / global companies at the same time.
- Before a validation / substitution can be performed, it must be activated. The following levels of activation are possible:
  - 0 Inactive
  - 1 Active
  - 2 Active, except for batch input

# Validations, Substitutions & Rules: Summary





 This Unit showed you how to use, set up, activate and execute validations and substitutions in the FI-SL system

## **Exercises**



Unit: Validations, Substitutions and Rules

**Topic: Validations** 



At the conclusion of this exercise, you will be able to:

• Define and Execute a Validation in FI-SL



Regional Managers have to ensure that any adjustment postings made in FI-SL are restricted to the correct version and document type. Additionally, the correct combinations of Lines of Business and revenues for special reports must feature in such postings.

### 1-1 Postings from FI-SL

For your adjustment postings in FI-SL you must ensure that for your company code the correct combination of products with Line of Business (ZZLOB) are entered.

Allowed LOB: PTROXX1 CHEMXX1 COMMXX1 PHRMXX1 (XX = your Group No.)

*Material:* T-IC-R2009

In the event that an incorrect combination is entered you should receive a message of type E (error)

'Group xx: Incorrect combination material & / lob &' (xx = your group number) Procedure to follow:

1-1-1 Create a Validation GXX-VAL (XX = your group number) for the Application area GL in Callup point 0002.

Use your User table GXX-UTAB and enter the description 'Material/Line' Insert an entry with one step 'Allowed Material and Line' and use the Formula Builder to define your Prerequisite and Check.

- 1-1-2 Define the message required with the number 2xx (xx = your group number) and after saving it, enter it into your validation step.
- 1-1-3 Check your validation step and then go back to save your validation.
- 1-1-4 Simulate your validation and check to see the expected result. *Procedure is case sensitive.*

1-1-5 Activate the validation for your company code ACXX for Callup point 002

Perform the following FI-SL Document Entry:

Company Code: ACXX (XX= Group no.)

Document Type:

Version: 002

Your User Table: **GXX-UTAB** 

Additional Currency: USD

Posting Date: Current Date

Target Ledger: Your Ledger

Document Line Entry:

*Rev. account:* **800400** 

Material: T-IC-R2009

Enter an incorrect line (e.g. PETR001) and view the resulting message.

## **Exercises**



Unit: Validations, Substitutions and Rules

**Topic: Substitutions** 



At the conclusion of this exercise, you will be able to:

• Define and execute a Substitution in FI-SL



The same managers have decided to reorganize and regroup their Lines into sectors and aggregate the revenues for special reports.

### 2-1 Substitution

Postings to your Line PTROXX1,PTROXX2,CHEMXX1,CHEMXX2,COMMXX1,COMMXX2 PHRMXX1 and PHRMXX2 are to be substituted into the 4 sectors:

### PTRO,CHEM,COMM,PHRM.

Condition:	PTROXX1	OR	PTROXX2
	CHEMXX1	or	CHEMXX2
	COMMXX1	or	COMMXX2
	PHRMXX1	or	PHRMXX2

Procedure to follow:

- 2-1-1 Create a Substitution Gxx-SUB (xx=Group number) for the Application Area GL in Callup point 0002. Use your User Table Gxx-UTAB and enter the description 'Substitution Sectors'
- 2-1-2 Insert 4 entries using the appropriate field RZZLOB and for each entry needed in your substitution use the Formula Builder to define the prerequisites. In each entry enter the substituted values and then check each entry before going back to insert a new one.
- 2-1-3 After you have checked all your entries go back to save your substitution.
- 2-1-4 Simulate the substitution to see if you can expect the right effect: (Substitution initial screen  $\rightarrow$  **Display**  $\rightarrow$  **Simulate**)

- 2-1-5 Activate the substitution for your company code in Callup point 0002.
- 2-1-6 Enter the following FI-SL document lines, making use of Document type A2 and User table GXX-UTAB:

Account	LOB	Amount in USD
800200	PTROXX1	5000-
800200	CHEMXX2	6000-
800200	COMMXX1	7000-
800200	PHRMXX2	8000-
800300	PTROXX2	1000-
800300	CHEMXX1	2000-
800300	COMMXX2	3000-
800300	PHRMXX1	4000-
800400	PTROXX1	3000-
800400	CHEMXX2	4000-
800400	COMMXX2	5000-
800400	PHRMXX2	6000-

(Negative amounts)

The **Version** for this posting is **1**.

2-1-7 Check your postings (and substituted Lines of Business) with FI-SL actual local documents display

## **Solutions**



Unit: Validations, Substitutions and Rules

**Topic: Validations** 

1-1 Postings from FI-SL

For your adjustment postings in FI-SL you must ensure that for your company code the correct combination of products with Business Lines are entered.

Material: T-IC-R2009

Allowed Business Lines: PTROXX1, CHEMXX1, COMMXX1 or PHARMXX1 (XX = your Group No.)

In the event that an incorrect combination is entered you should receive a message of type E:

'Group xx: Incorrect combination material & / Business Line &'

Procedure to follow:

1-1-1 Create a Validation GXX-VAL (XX = your group number) for the Application area GL in Callup point 0002.

### Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  IMG $\rightarrow$  SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$ Basic Settings  $\rightarrow$  Validation  $\rightarrow$  Maintain Local Validation  $\rightarrow$  Environment  $\rightarrow$  Validation  $\rightarrow$  Validation  $\rightarrow$  Create

Validation: **GXX-VAL** 

Application area: GL

Callup point: 2

Continue

User Table: GXX-UTAB

Validation description: 'Material/Business Lines'

**Insert Entry** 

Validation entry description: 'Allowed Material and Business Lines'

#### Prerequisite $\rightarrow$ Formula Builder

Double-click on Material GLU1-RMATNR

Double-click on '=' indicator

Double-click on 'Constant'

Insert 'T-IC-R2009'

Result: GLU1-RMATNR = 'T-IC-R2009'

(Material)

Back F3

#### Check → Formula Builder

Double click on Business Line

### Prerequisite → Formula Builder

Double-click on Business Line

Double-click on '='

Double-click on 'Constant'

Insert 'PTROXX1' (xx = your group number)

Double-click on 'OR'

Double-click on Business Line

Double-click on '='

Double-click on 'Constant'

Insert 'CHEMXX1' etc until 'PHARMXX1'

Result: Business Line = 'PTROXX1' OR Business Line

- = 'CHEMXX1' OR Business Line = 'COMMXX1' OR Business Line
- = 'PHARMXX1'
- 1-1-2 Define the message required with the next free number and after saving it, enter it into your validation entry.
  - →Maintain messages

Message class Z2

Change

Message number 2xx (xx = group no.)

Maintain in logon language

**Insert** 'Group xx: **Incorrect combination of material & / Business Line &'** 

Save and back to Validation entry

Message Type = E

Insert your number 2xx

Output Fields: 1. GLU1 RMATNR 2 GLU1 RZZLOB

Check

Back (F3)

Save Validation

1-1-3 Check your validation entry and then go back to save your validation.

Check

Back (F3)

Save Validation

### 1-1-4 Simulate your validation and check to see the expected result

Procedure is case sensitive.

### $Validation \rightarrow Display \rightarrow Simulate$

Typ Object Val.

Field GLU1 RMATNR ... T-IC-R2009 Field GLU1 RZZLOB ... SOFTWR

Execute.

Result:

Step ObjectVal001 PrereqTrue001 CheckFalse001 Messge Group xx: Incorr..E2xx

End Result Validtn failed. Type E Messge

### 1-5 Activate the validation for your company code ACXX for Callup point 002

Exit Validation and back to Menu 'Change View 'Validation for Special Purpose Ledger/Co.Code': Overview'

**New Entries** 

Insert

CoCode CallPnt Validation Actvtn level

ACXX 2 GXX-VAL 1

Save

Perform the FI-SL Document Entry as indicated in your exercise:

Company Code: ACXX (XX= Group no.)

Document Type: A2

Version: 002

Your User Table: GXX-UTAB

Additional Currency: USD

Posting Date: Current Date
Target Ledger: Your Ledger

Document Line Entry:

*Rev. account:* **800400** 

Material: T-IC-R2009

Enter an incorrect Business Line (e.g. SOFTWR) and if view the message you will get.

## **Solutions**



Unit: Validations, Substitutions and Rules

**Topic: Substitutions** 

#### 2-1 Substitution

Postings to your Business Lines PTROXX1, PTROXX2, CHEMXX1, CHEMXX2, COMMXX1, COMMXX2, PHARMXX1 and PHARMXX2) are to be substituted into the 4 Lines of Business:

PETRO, CHEMICAL, COMMNTN, PHARML.

Condition: PTROXX1 OR PTROXX2

CHEMXX1 OR CHEMXX2

COMMXX1 OR COMMXX2

PHARMXX1 OR PHARMXX2

#### Procedure to follow:

2-1-1 Create a Substitution Gxx-SUB (xx=Group number) for the Application Area GL in Callup point 0002. Use your User Table Gxx-UTAB and enter the description 'Substitution Business Lines'

#### Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SAP$   $Reference\ IMG 
ightharpoonup Financial\ Accounting 
ightharpoonup Special\ Purpose\ Ledger$   $ightharpoonup Basic\ Settings 
ightharpoonup Substitution 
ightharpoonup Maintain\ Local\ Substitution 
ightharpoonup Environment 
ightharpoonup Substitution 
ightharpoonup Substitution 
ightharpoonup Create$ 

Substitution: Gxx-SUB

Application area: GL

Callup point: 2

Continue

User Table: GXX-UTAB

*Validation description:* 'Business Lines → LINES OF BUSINESS'

2-1-2 Insert an entry using the appropriate field and for each entry needed in your substitution use the Formula Builder to define the prerequisites. In each entry enter the substituted values and then check each entry.

**Insert Entry** 

- a.) Pick Field for Substitution: **GLU1-RZZLOB** and continue
- b.) Substitution entry description: 'Business Line: PETRO'
- c.) Prerequisite → Formula Builder
- d.) Double click on Business Line
- e.) Double-click on '='
- f.) Double-click on 'Constant'
- g.) Insert 'PTROXX1' (xx = your group number)
- h.) Double-click on 'OR'
- i.) Double-click on Business Line
- j.) Double-click on '='
- k.) Double-click on 'Constant'
- 1.) Insert 'PTROXX2'

*Result:* Business Line = 'PTROXX1' OR Business Line = 'PTROXX2'

- m.) Back F3 to Step
- n.) Insert Substituted Value PETRO
- o.) Check Entry
- p.) Back F3 to Substitution

Insert Entry and repeat STEP (a. to p.) for the other 3 Entries for CHEMICAL, COMMNTN and PHARML.

- 2-1-3 Check your Substitution entry and then save your substitution. →Save
- 2-1-4 Simulate the substitution to see if you can expect the right effect: (Substitution initial screen>Display>Simulate)

Step Object Val.

Field GLU1 RZZLOB ... PTROXX1

Execute.

Result:

Step Object Val
001 Prereq ... True
001 Result ... PETRO

**End Result** 

2-1-5 Activate the substitution for your company code in Callup point 0002.

Exit Substitution and back to Menu 'Change View 'Substitution for Purpose Ledger/Co.Code': Overview'

**New Entries** 

Insert

CoCode CallPnt Substitution Actvtn level
Acxx 2 Gxx-SUB 1

Save

- 2-1-6 Perform the FI-SL Document Entry as indicated in your exercise:
- 2-1-7 Check your postings (and substituted Business Lines) with FI-SL actual local documents display

## **Sets and Variables**



## **Contents:**

- Using sets in FI-SL
- Basic sets
- Single sets
- Multi sets
- Defining sets
- Defining and using three types of variables: value, formula, and set variables

# **Sets and Variables: Objectives**





At the completion of this unit you will

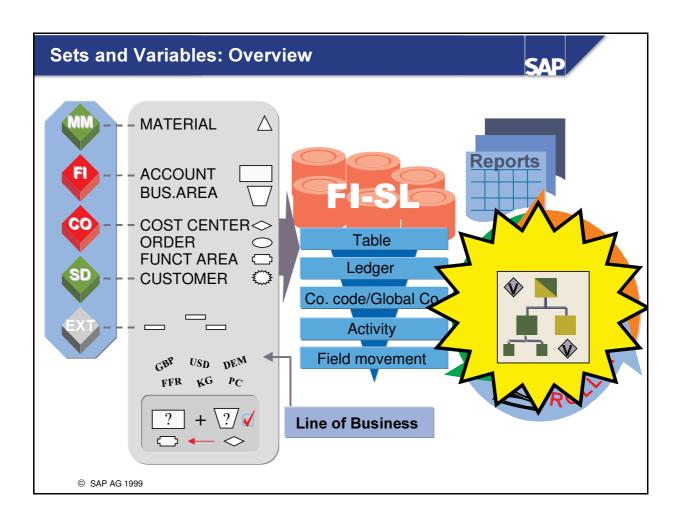
- be familiar with the terms Set and Variable
- know the different types of sets and variables
- know how to create sets and variables and
- know where they can be used

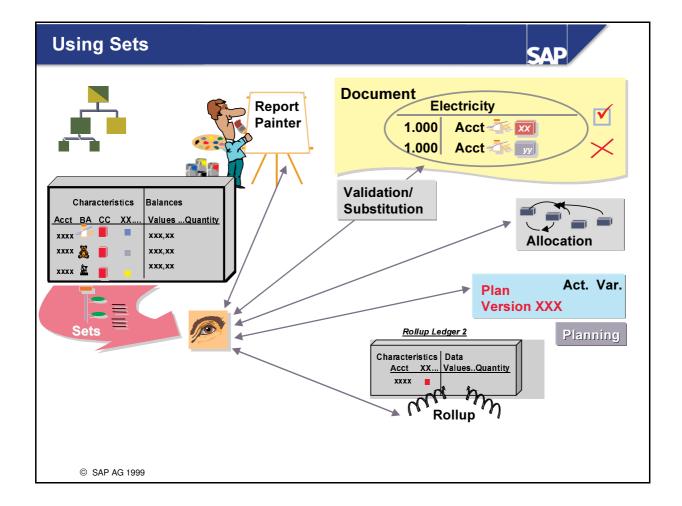
## **Sets and Variables: Business Scenario**



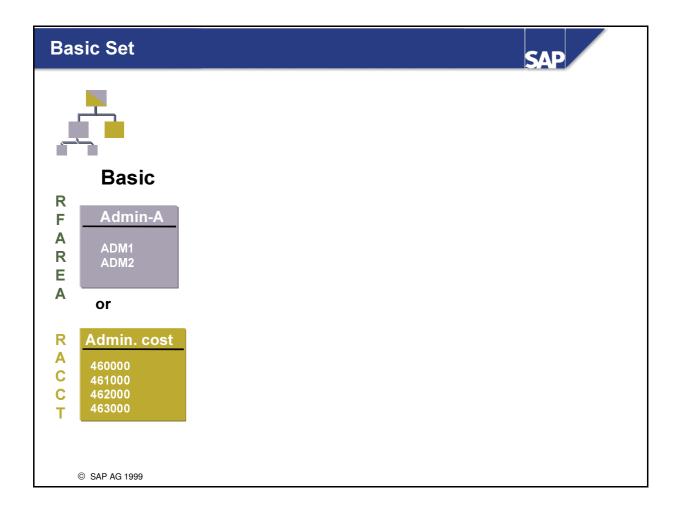


- Sets and Variables are used extensively in several FI-SL application areas and are used to organize how data is viewed and extracted from the database.
- With this in mind, it will be essential for the project members responsible for reporting to analyze the usefulness of sets in organizing and grouping data
- They will discover and appraise the logic involved in set structures and this will pave the way for the usage in the further FI-SL components reporting, allocation, planning and rollup

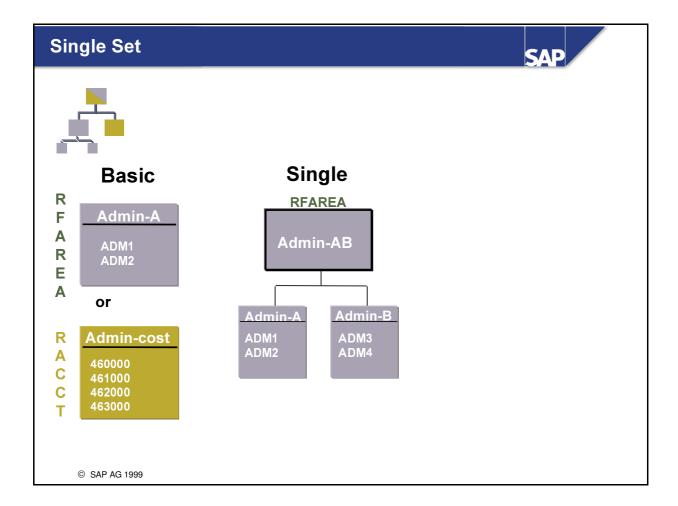




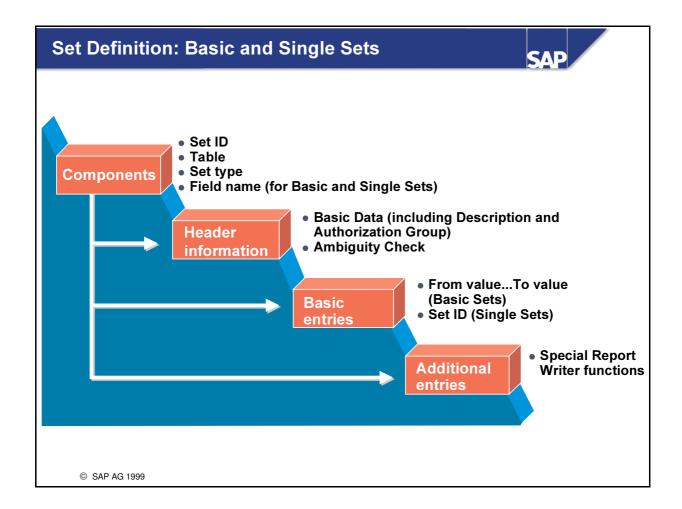
- A set is a flexible data structure used to represent values, ranges of values, and hierarchies.
- Sets are maintained centrally.
- Sets are used in almost all areas of FI-SL:
  - in formulas (using Boolean logic) for validation, substitution, and ledger selection
  - in reporting (Report Writer and Report Painter)
  - in allocation (assessment and distribution)
  - in planning
  - in rollups



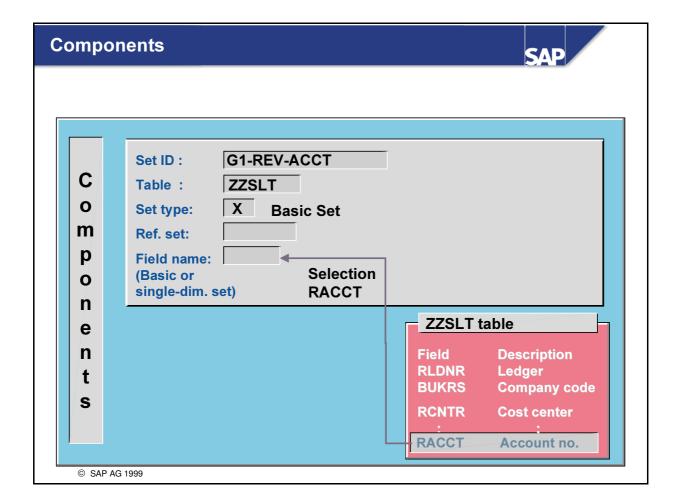
■ A basic set contains several values (single values or value ranges) that use the same characteristic.



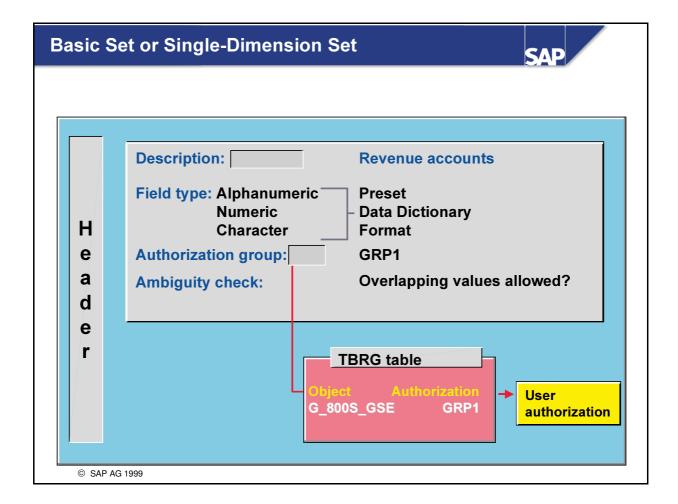
- A single-dimension (characteristic) set combines basic sets and other single-dimension sets.
- All of the sets in a single-dimension (characteristic) set use the same characteristic.



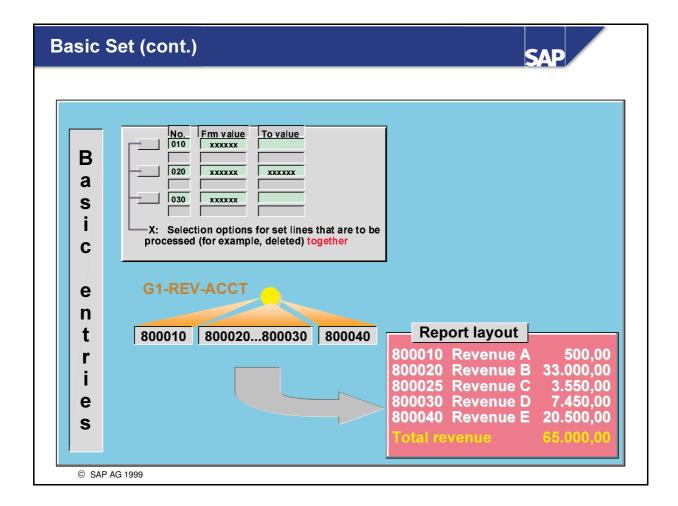
- These four elements are used to define sets:
  - components
  - header information
  - basic entries
  - · additional entries



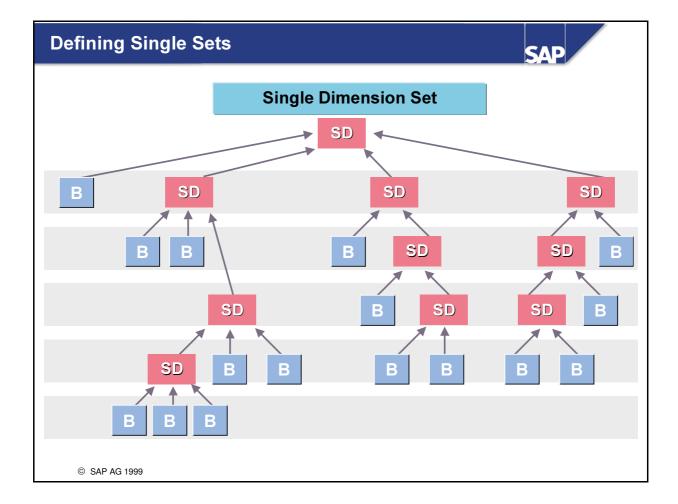
- Field Explanation
- Set ID Enter a 24-character identification in this field.
- Table Enter a name for the table in this field.
- For example, GLT0 or ZZSLT,...
- Set type Select one of the following set types:
  - Basic set
  - Single-dimension set
  - Multi-dimension set (Data set)
- Reference set: Enter the name of the set whose values you want to copy to the new set. You can then change the values.
- Field name: Enter the name of the field (for example, RACCT) that the basic set or single-dimension set uses.



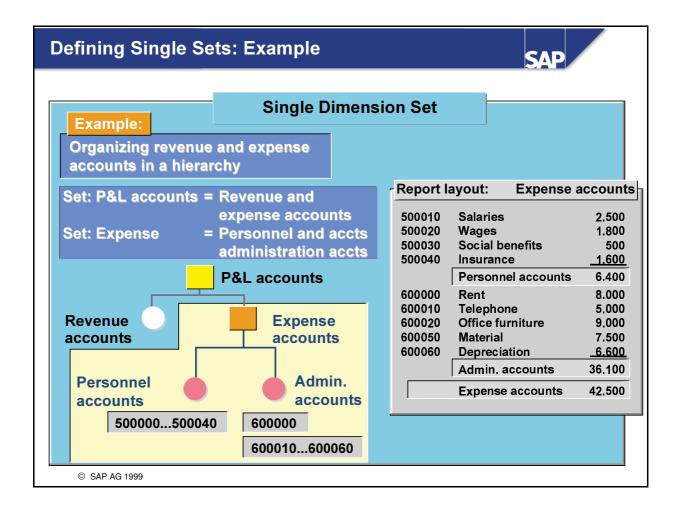
- Field Explanation
- Set text Enter a description up to 40 characters long.
- Ambiguity check The following is an example of overlapping values in a set:
  - Line 001 800000 to 800030
  - Line 002 800020
  - Line 003 800040
- The system issues the message: Lines 1 and 2 overlap. You can have the system check whether there are overlapping values in a set. The check can be performed:
  - after every entry or
  - when you save the transaction
- Authorization group: This field allows you to assign specific authorization(s) to a set.



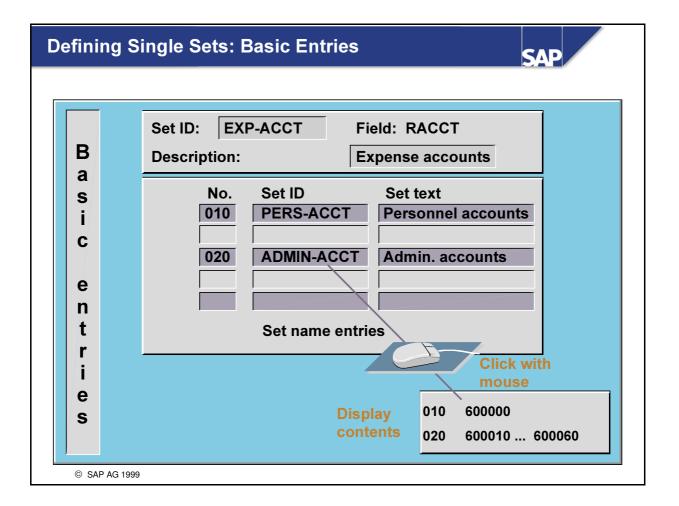
- Values can be added as single values or as From- and To-values
- If a set is used as a row set in a report, the intervals are broken down. (This is not the case for column sets.)



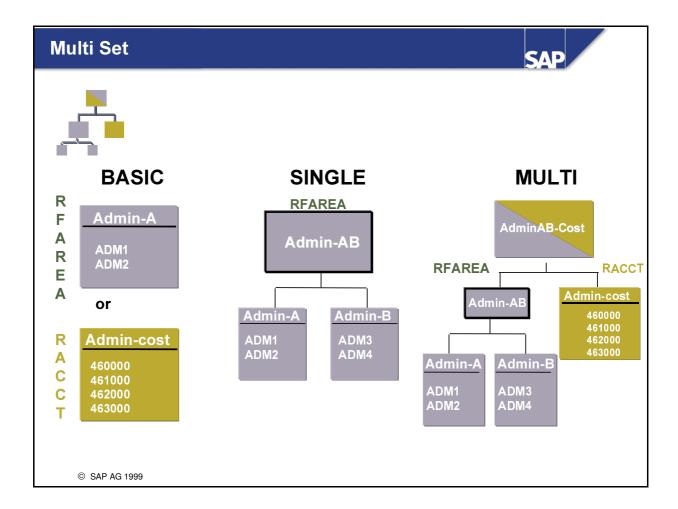
■ Single Dimension (Characteristic) sets are used to create hierarchies in the same field (characteristic) and consist of basic and/ or single dimension sets.



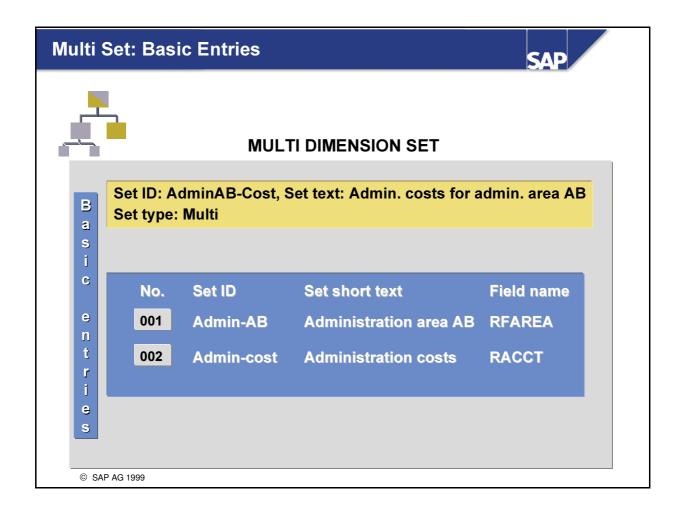
- Two examples of Single Dimension Sets:
  - P&L Accounts: Revenue and expense accounts
  - Expense accounts: Personnel accounts and Admin.accounts



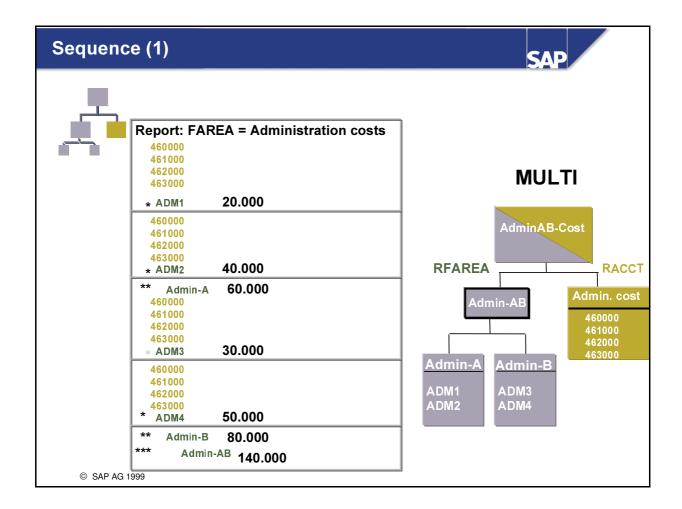
- You can enter basic or single-dimension set IDs on this screen.
- You can display a set by clicking on it with the mouse.



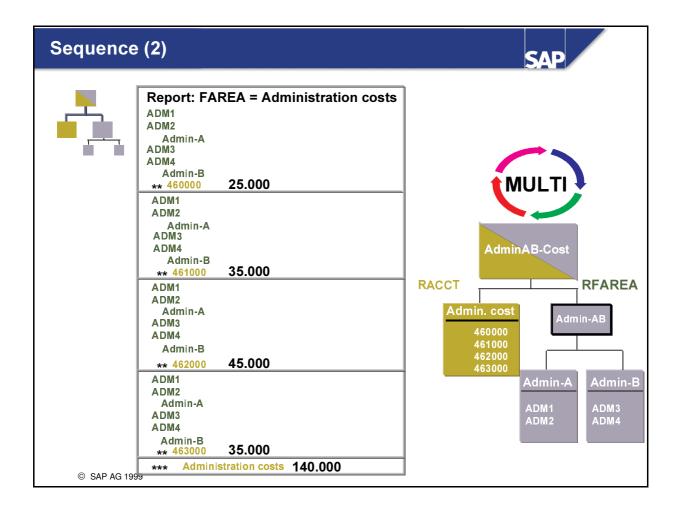
- A multi-dimension (characteristic) set combines sets that use different fields (characteristics).
- The above example shows the multi-dimension set that combines the single-dimension set for the RFAREA (functional area) field and the basic set for the RACCT (account) field.



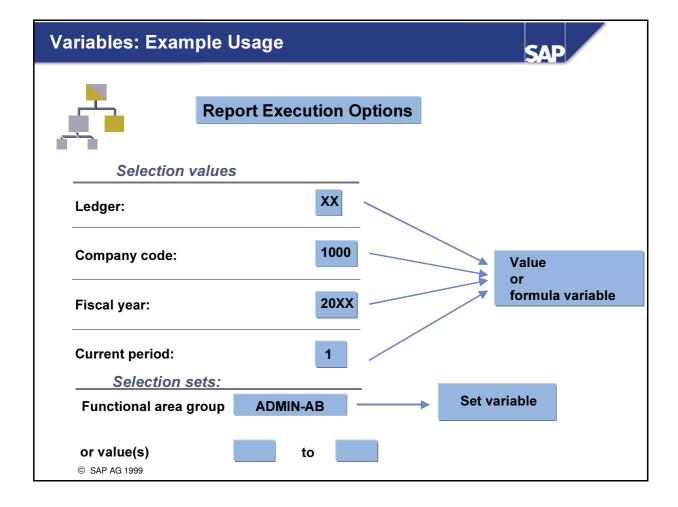
■ This slide illustrates the basic entries for a multi-dimension set to which the different fields (characteristics) are assigned.



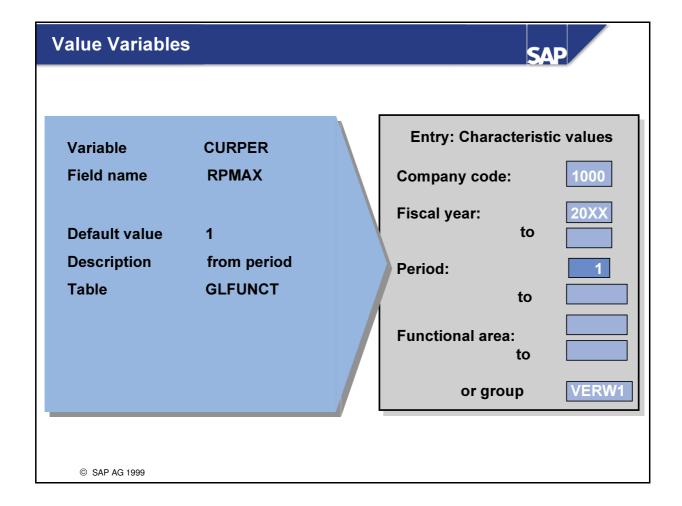
■ The sequence of the report rows corresponds to the sequence in which the sets are defined in the multi-dimension set.



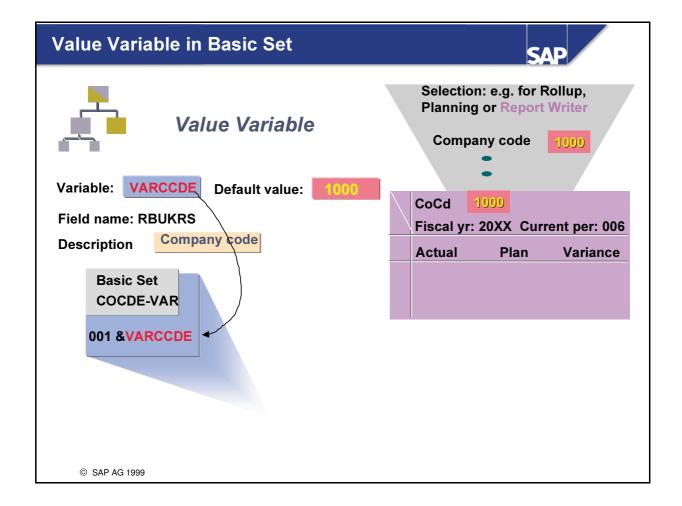
■ Changing the sequence of the sets in the multi-dimension set affects the report layout. If the set is used as the row set in a report, you only need to regenerate the report's report group. You must change the sequence of values in a set, and not in the report definition.



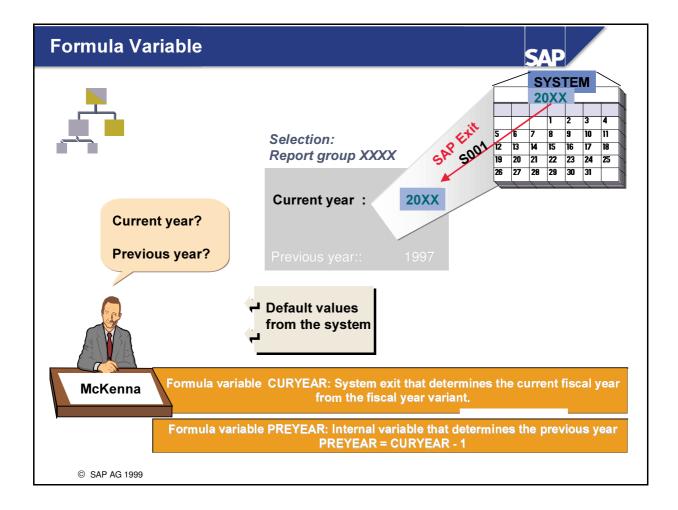
- Variables give you added flexibility in selecting input parameters in the following applications:
  - Information system (Report Painter and Report Writer)
  - Planning
  - Rollup
- There are three types of variables:
  - Value variables (for example, company code, ledger)
  - Formula variables (for example, system year, month)
  - Set variables (for example, account group, cost center group)
  - In the Report Painter variables can be directly used
  - In the Report Writer, Planning or Rollup you can use variables, but beforehand these variables must be included in sets.



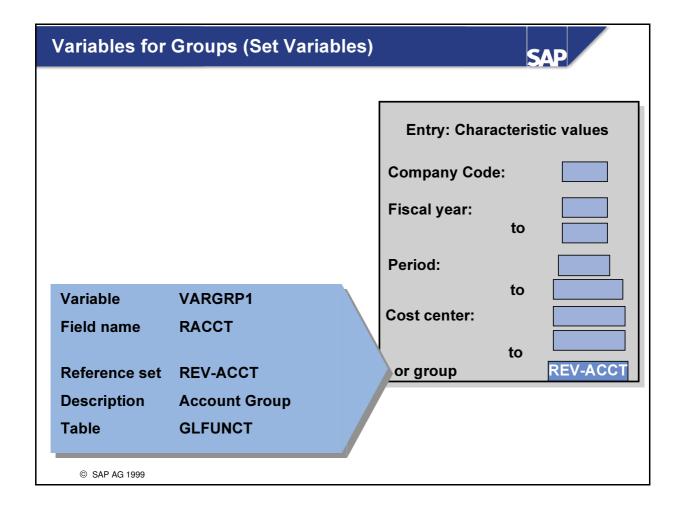
- You can use a value variable instead of a single characteristic value directly in a Report Painter report definition.
- The variable default value is displayed on the selection screen of the appropriate report. You can overwrite this default value.
- You can use variables in rows, columns, and in the general data selection criteria of a report definition.



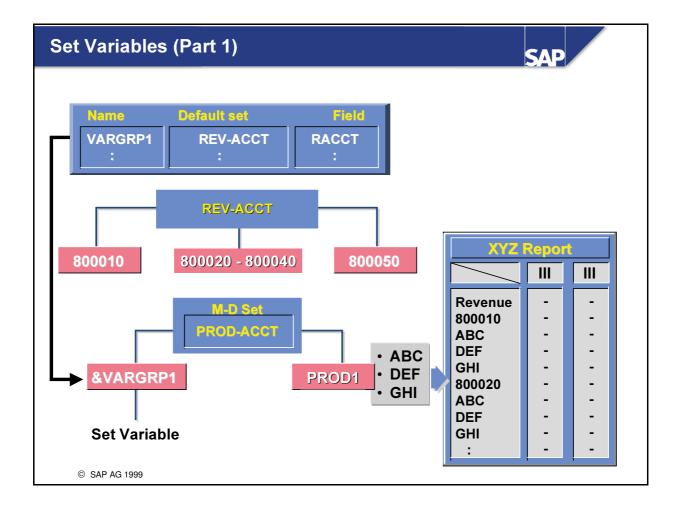
- If you want to use a variable in Report Writer, Rollup or Planning it must first be included in a Basic set.
- The procedure here is as follows:
  - Create a variable which contains the default value and a description.
  - Enter the variable in a row of a basic set. The & symbol is used as a prefix for all variables.
- When, for example, you select the report data, the system proposes the variable's default value and description as an entry in the input fields.



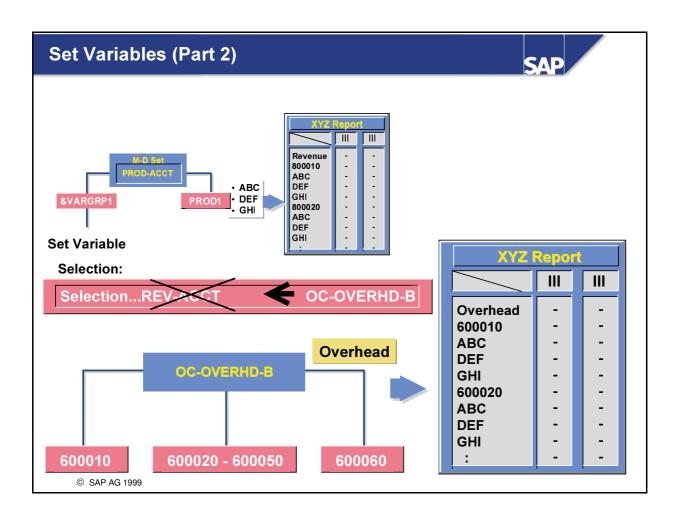
- In addition to the value variables, you can create formula variables.
- Formula variables can be used directly in the Report Painter definition. For use in Report Writer, Planning or Rollup you include the variables in Basic sets.
- The default value of a formula variable is not preset, rather it is calculated using the defined formula whenever the program is executed.
- There are two different types of formula variables:
- Formula variables for a non-numeric (or alphanumeric) field (for example, ZZSLT-RACCT, ZZSLT-RFAREA). The default value of the variable is calculated using the SAP exits or user exits.
- Formula variables for a numeric field (for example, ZZSLT-RPMAX, ZZSLT-RYEAR). The default value is calculated using the specified formula. The formula can contain constants (1997), value variables (&WVAR), formula variables (&FVAR), and SAP exits and user exits (#S001, #U001, etc.).
- A variable can be defined as an internal variable. This means that the default value for the variable can not be changed when the variable is used at the time of transaction (e.g. when a report is executed).
- The system automatically designates formula variables that refer to other variables as internal variables.

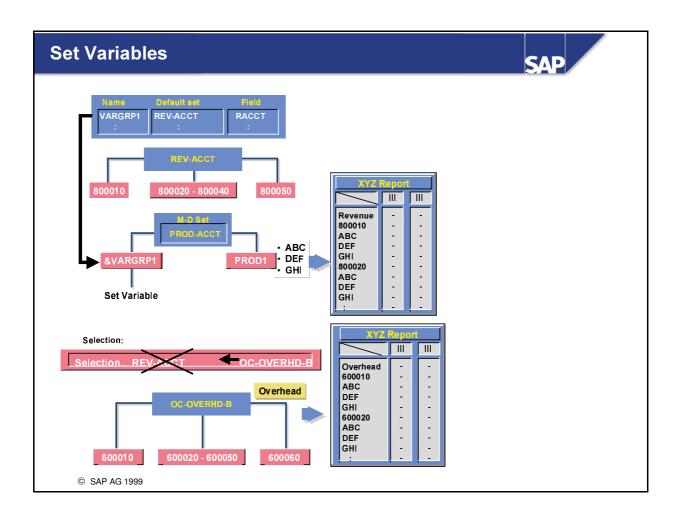


■ If you use variables for groups (so-called set variables) in the report definition, you can enter a group, an interval or several single values to restrict the data displayed in the report when you execute the report.



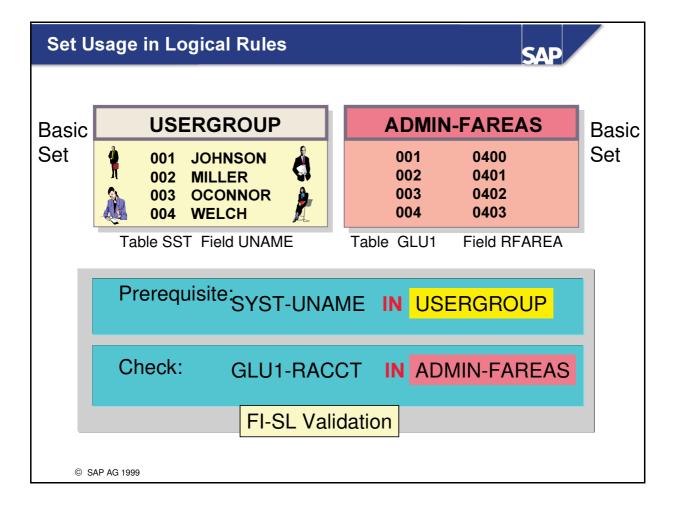
- Example of a Set Variable in a multi-dimension set (for the Report Writer report definition)
- Set variables give you the option of choosing a hierarchy or sub-hierarchy when you select your data.



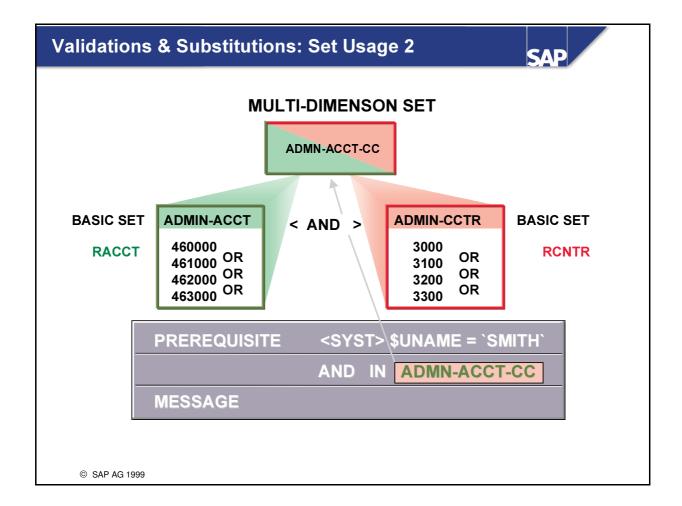


Defining Set Variables		SAP
Set variable	VARGRP1	
Table	GLFUNCT	
Field name	RACCT	Account number
Description	Account G	roup
Default entries		
O All values	DEV ACCT	
O Default set	REV-ACCT	
Entry fields on selection screens		
○ Set and value entry		
Only set entry		
Only value entry		
Authorization group		
© SAP AG 1999		

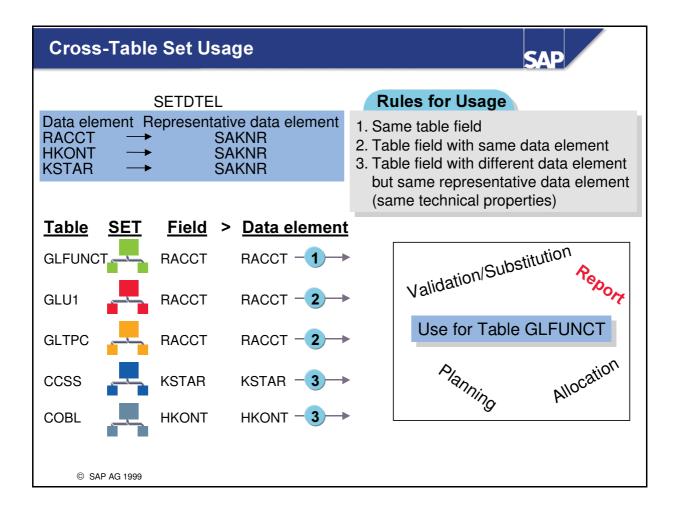
- Set variables in Report Writer reports can be replaced by a set or by values at the time of selection.
- Each set variable may have a default set. You can only use basic sets or single-dimension sets as the default set. The table field of the default set must correspond with that of the set variables, that is, the representative data elements of the fields must match.
- Radio button for All values default set: You do not have to enter a default set for this set variable. If this set variable is not replaced later by a set during the execution of a Report Writer report, all values will be selected for the table field of set variables.
- Radio button for Set and value entry: If you mark this radio button, you define that the set variable in Report Writer reports can be replaced by a set, or by values. An input field for a set and input fields for values will then appear on the selection screen of a report.
- Radio button for Only set entry: Marking this radio button defines that the set variable in Report Writer reports can only be replaced by sets. Later, only one input field for a set and no input fields will appear on the selection screen of a report.
- Radio button for Only value entry: Marking this radio button ensures that a set variable in Report Writer reports can only be replaced by values. Input fields for values, but no input field for a set, will appear on the selection screen of a report.



- Instead of using fields in a prerequisite or in a check, you can enter sets in the format table-field name IN SETNAME.
- Sets contain a quantity of values or value intervals for a specific field.
- The above example uses the following logic:
  - If the user is contained in the set 'USERGROUP', then check if he/she uses one of the functional areas contained in the set 'ADMIN-FAREAS'.



- Whereas individual values are connected by an implicit OR in Basic sets (or Single-dimension sets), combinations of values (AND logic) from various sets can be validated in Multi-dimension sets.
- The above example uses the following logic:
  - If the User is Smith, check if he/she uses a valid combination of one of the accounts contained in the Set ADMIN-ACCT (characteristic RACCT) and one of the cost centers contained in the Set ADMIN-CCTR (characteristic RCNTR).



- Sets can be used not just for the table field for which they were created, but for every compatible table field as well.
- Representative data element in a set . The representative data element of a set or variable controls the way sets and variables for table fields can be used.
- Sets and variables can be used for a certain table field if one of the following conditions is met:
  - They were created for the table field
  - They were created for a table field that has the same data element
  - They were created for a table field that has a different data element but the same representative data element.
- If two table fields have different data elements, but the same technical properties, a representative data element defines that sets and variables can be used for both table fields.
- For example data elements KSTAR and RACCT both have the same representative data element SAKNR (this name is stored in table SETDTEL).
- Data element Repr. data element
  - KSTAR SAKNR
  - RACCT SAKNR
- In a report for table GLFUNCT for the Account characteristic (field GLFUNCT-RACCT with data element RACCT), you could use all sets created for table fields with the data elements KSTAR, RACCT or SAKNR.

# **Sets and Variables: Summary**





In this unit, you have learned

- how to define Basic, Single and Multi sets
- how to define value, formula and set Variables
- how Sets and Variables are used in FI-SL

# **Exercises**



**Unit: Sets and Variables** 

**Topic: Sets** 



At the conclusion of this exercise, you will be able to:

• Define Basic, Single and Multi Dimension Sets to be used later in Reports, Planning, Allocations and Rollups



Sets and Variables are used extensively in several FI-SL application areas and are used to organize how data is viewed and extracted from the database.

With this in mind, it will be essential for the project members responsible for reporting to analyze the usefulness of sets in organizing and grouping data.

They will discover and appraise the logic involved in set structures and this will pave the way for the usage in the further FI-SL components reporting, allocation, planning and rollup.

#### 1-1 Sets

Menu Path to use for the definition of Sets:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup Special\ purpose$   $ledger 
ightharpoonup Tools 
ightharpoonup Set\ Maintenance 
ightharpoonup Sets$ 

Define all your Sets to the table **ZZSLT** 

All your sets should begin with the prefix GXX (XX= your Group Number)

#### 1-1-1 Basic Sets

Account number (Field RACCT)

GXX-WAGES 'Wages' 420000 421000

GXX-SALARY 'Salaries' 430000 431000

GXX-GEN-EXPENSE 'General Expenses' 472000 476000

GXX-REVENUES 'Revenues' 800200 800300 800400 Functional area (Field RFAREA) GXX-FAREAS 'Functional areas' 0300 0400 0500 Line of Business (Field RZZLOB) GXX-ZZLOB 'Line of Business' PTROXX1 CHEMXX1 COMMXX1 PHRMXX1 GXX-SECTOR 'Line' **PETROLEUM CHEMICAL COMMUNICATION PHARMACEUTICAL** Material (Field RMATNR) GXX-PRODUCTS 'Products' T-IC-F1001 T-IC-F1002 T-IC-F1003 T-IC-R2007 T-IC-R2008 T-IC-R2009 Ledger (Field RLDNR) GXX-LEDGER 'Ledger AA - RR depending on your group Version (Field RVERS) GXX-VERS1 'Version 1' Record Type (Field RRCTY) GXX-ACTUAL 'Actual' 0

# 1-1-2 SINGLE-DIMENSION SET

Account number (Field RACCT)

GXX-OVERHEAD 'Overhead Accounts'

001 GXX-WAGES

002 GXX-SALARY

003 GXX-GEN-EXPENSE

# 1-1-3 MULTI-DIMENSION SET

GXX-SECTOR-REV 'Sector/Revenues'

001 GXX-SECTOR

002 GXX-REVENUES

# **Exercises**



**Unit: Sets and Variables** 

**Topic: Variables** 



At the conclusion of this exercise, you will be able to:

• Define Value, Formula and Set Variables to be used later in reports, planning allocations and rollups



The decision which characteristic values and groups to use in the FI-SL applications (e.g. reports) can sometimes best be made at run time. Therefore, Regional Managers would like to investigate what flexibility the FI-SL system provides regarding variables and their usage

#### 2-1 Variables

Menu Path to use for the definition of Variables:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup Special\ purpose \ ledger 
ightharpoonup Tools 
ightharpoonup Set\ Maintenance 
ightharpoonup Variables.$ 

Define all your Variables to the table ZZSLT

All your variables should begin with the prefix GXX (XX= your Group Number)

#### 2-1-1 Value Variables

GXX-PER (Field RPMAX)

Default value: Current Period

Text: Current Period

GXX-CCD (Field RBUKRS)

Default value: ACXX (XX= Group Number)

Enter this Variable into a Basic Set GXX-COCODE 'Co. Code' (Field RBUKRS). Use the Menu Edit>Variable and enter &GXX-CCD

#### 2-1-2 Formula Variable

GXX-FYR (Field RYEAR)

Entry: '#S001' Text: Fiscal Year

## 2-1-3 Set Variable

GXX-ACG (Field RACCT)

Default Set: GXX-GEN-EXPENSE

Text: Account group

# 2-2 SET and VARIABLE UTILITIES

From the Set/Variable application menus you can reach these under the menu entry 'Utilities'

Use the following utilities to search for and view the contents and use of your sets and variables (Created by Group 'AC220-XX'). When running these programs, select 'Display graphics', and/or usage, if available.

- 2-2-1 Set & Variable Directory
- 2-2-2 Graphics
- 2-2-3 Set usage
- 2-2-4 Find values in sets

# **Solutions**



**Unit: Sets and Variables** 

**Topic: Sets** 

Menu Path to use for the definition of Sets:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup Special\ purpose \ ledger 
ightharpoonup Tools 
ightharpoonup Set\ Maintenance 
ightharpoonup Sets$ 

As you define your sets, select ZZSLT, the Special Ledger Summary Table that contains the dimensions the set will use.

A set links together specific values or ranges of values under a set name. These values exist within one or more dimensions of a database table. A dimension is a single field or column of a logical database (table). Account, cost center, and business area are examples of dimensions.

All your sets should begin with the prefix GXX (XX= your Group number)

You should not use a number as the first character of the set name.

Beginning with Release 4.0, the set name can contain up to 24 characters for sets created in the Special Purpose Ledger (FI-SL) application component.

#### 1-1 Basic Sets

Example Solution for Set GXX-WAGES

Set ID: GXX-WAGES

Table: ZZSLT

Set type Basic Set

Continue.

Field name: **RACCT** 

Continue

Description: Wages

Set lines:

From value

Enter data as required 420000

Enter data as required 421000

Save set.

repeat the steps above for all basic Sets

# 1-2 Single-dimension set

Example Solution for Set GXX-OVERHEAD

Set ID: GXX-OVERHEAD

Table: **ZZSLT** 

Set type: Single Set

Continue.

Field name: RACCT

Continue.

Description: Overhead Expenses

Set lines:

Set ID

**GXX-WAGES** 

**GXX-SALARY** 

**GXX-GEN-EXPENSE** 

#### 1-3 Multi-dimension set

Set ID: GXX-SECTOR-REV

Table: ZZSLT
Set type Multi Set

Continue.



When building a Multi-Set, the system will not require the assignment to a specific Characteristic. The set will derive the characteristics from the sets assigned

Description: Sectors/Revenues

Set ID

**GXX-SECTOR** 

**GXX-REVENUES** 

# **Solutions**



**Unit: Sets and Variables** 

**Topic: Variables** 

#### 2-1 Variables

Menu Path to use for the definition of Variables:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup Special\ purpose$  ledger  $ightharpoonup Tools 
ightharpoonup Set\ Maintenance 
ightharpoonup Variables.$ 

All Variables will be associated to Summary Table ZZSLT



A **variable** is a placeholder for data to be specified when you run a report that uses the variable. For example, a variable could be a company, the current year, the current month, a date, or a user name

The Text values entered into the header of your variable will be viewed on the Selection Screen at the time of Report Execution.

All your variables should begin with the prefix GXX (XX= your Group Number)

#### 2-1-1 Value Variables

GXX-CCD (Field RBUKRS)

Default value: ACXX (XX= Group Number) This is your Company Code.

Enter this Variable into a Basic Set GXX-COCODE 'Co. Code' (Field RBUKRS). Use the Menu Edit>Variable and enter &GXX-CCD



Make sure to use the Variable icon or "Variable" on the menu path while creating sets. Since there is no Master Data validation taking place while entering values, this is the only way your Variable will be recognized.

Example Solution for Variable GXX-PER

Variable: GXX-PER
Table: ZZSLT
Field name: RPMAX

*Variable type:* 

Value

Basic data

Description: Current Period
Default value: Current Period

## 2-1-2 Formula Variable

Example Solution for Variable GXX-FYR

Variable: XX-FYR
Table: ZZSLT
Field name: RYEAR
Variable type Formula

Basic data:

Description: Fiscal year

Formula: "#S001' (view formula options by pressing the "formula exits" button) You may select from this dialogue box. This is used as a reference of available exits.

Save variable.

## 2-1-3 Set Variable

Example Solution for GXX-ACG
Variable: GXX-ACG
Table: ZZSLT
Field name: RACCT

Variable type: Set

Basic data:

Description: Account Group

Default Set: GXX-GEN-EXPENSE

Entry fields on selection screens:

Set and value entry

Save variable.

## 2-2 SET and VARIABLE UTILITIES

You can use the set and variable utilities to obtain additional information about a set or variable (for example, to check set and variable usage and to transport sets and variables).

# 2-2-1 Set & Variable Directory

You can use the *Utilities* → *Set directory* function to produce a directory listing of all or selected sets. You can use this function from the *Create/Display/Change/Delete Set* screens.

Procedure

## Choose Utilities $\rightarrow$ Set directory.

The Set Directory screen appears.

Enter data as required.

The data you enter determines the data that is selected for display.

If you want to display the graphics of the selected sets, select *Display graphics*.

#### Choose Program $\rightarrow$ Execute.

A list of the sets meeting the criteria you entered on the previous screen appears.

You can use the *Utilities*  $\rightarrow$  *Variable directory* function to produce a directory listing of all or selected variables. You can use this function from the *Create/Display/Change/Delete Variable* screens.

Procedure

#### Choose Utilities $\rightarrow$ Variable directory.

The Variable Directory screen appears.

Enter data as required.

The data you enter determines the data that is selected for display.

If you want to display where the variable is used in the system (for example, in a set or in a report), select *Display usage*.

#### Choose Program $\rightarrow$ Execute.

A list of the variables meeting the criteria you entered on the previous screen appears.

## 2-2-2 Graphics

On the Create/Display/Change/Delete Set screens, choose Utilities  $\rightarrow$  Graphics.

The Set Graphics screen appears.

Enter the name of the set for which you want to display a graphic. Choose  $Program \rightarrow Execute$ .

A graphic of the set is displayed on the Display Set screen.

## 2-2-3 Set usage

## Choose Utilities $\rightarrow$ Set usage.

The Display Set Usage screen appears.

Enter data as required.

The data you enter determines the data that is selected for display.

## Choose Program $\rightarrow$ Execute.

The Where-Used List screen appears, displaying information about the set you entered on the previous screen, such as the set name, the table that uses the set, and where the set is used.

#### 2-2-4 Find values in sets

You can use the *Utilities*  $\rightarrow$  *Find* values in sets function to see if a field value is being used in a set. You can use this function from the *Create/Display/Change/Delete Set* screens.

#### **Procedure**

#### Choose Utilities $\rightarrow$ Find values in sets.

The Find Values in Sets screen appears.

Enter data as required.

The data you enter determines the data that is selected for display.

Set the indicators in the *Output options* group box, as required.

If you want to display where the set is used in the system (for example, in another set or in a report), select *With usage*.

If the set value you enter is included in an interval of values, you can display the interval in which the set value is found by selecting *Display values found*.

## Choose Program $\rightarrow$ Execute.

The system displays information about the value(s) you entered on the previous screen, such as the sets that use the value(s).

# **Report Painter**



# **Contents:**

- Report Painter Components
- Library
- Row and Column Structures
- Formulas
- General Data Selection
- Report Texts
- Processing Report Groups

# **Report Painter: Objectives**





At the completion of this unit you will

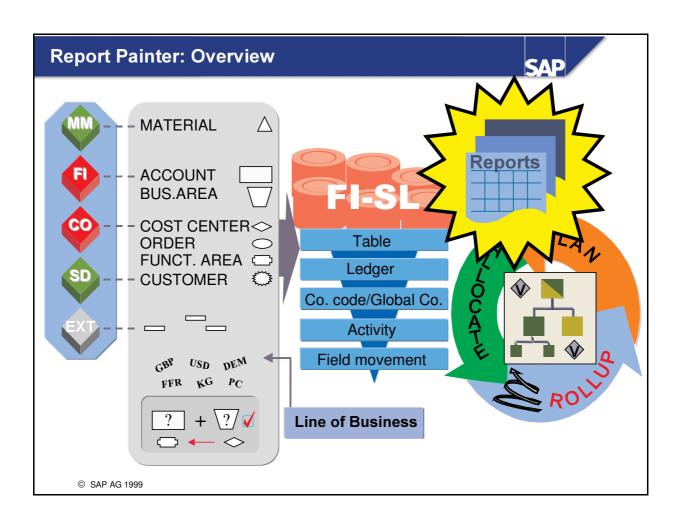
- be familiar with the most important parameters for creating reports using the Report Painter
- be able to define and execute a simple report

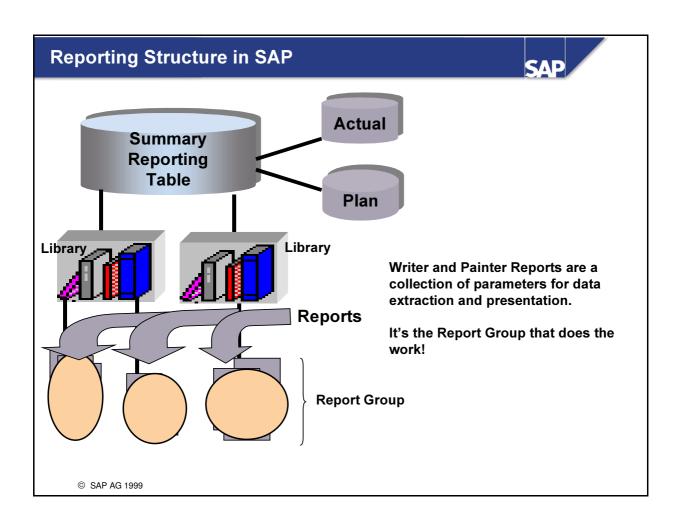
# **Report Painter: Business Scenario**

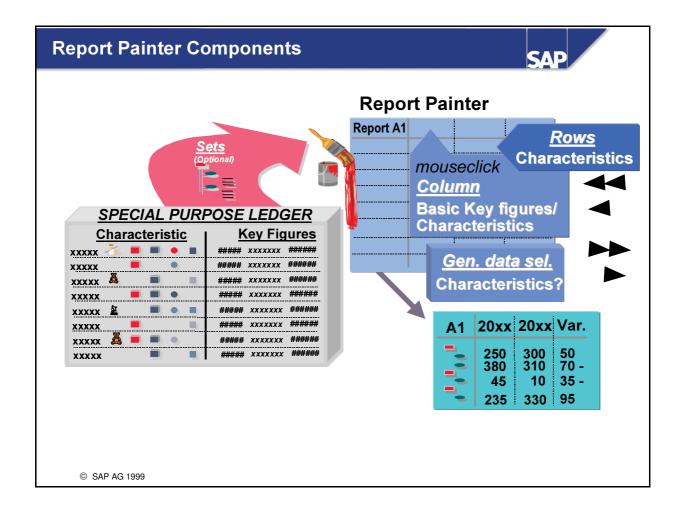




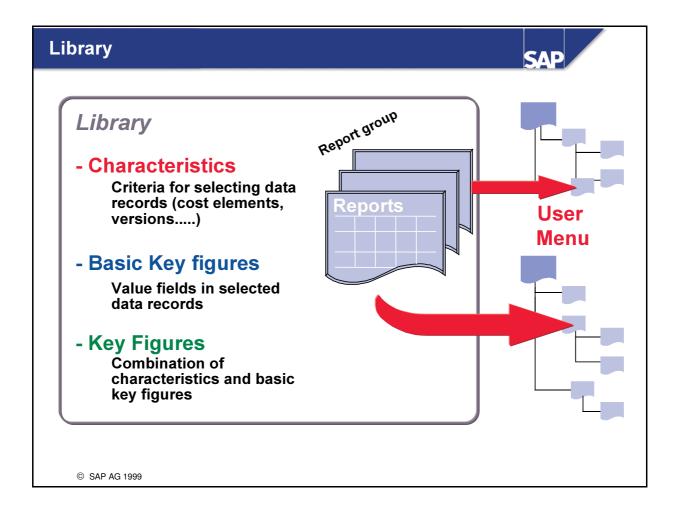
- With the design of the reporting database completed and the FI-SL area accepting data from the various application areas, initial reports will need to be created utilizing the newly created field as well as the other characteristics that have been chosen
- Among others you will be required to create and execute a report with quarter to date information broken down by account and Line of Business



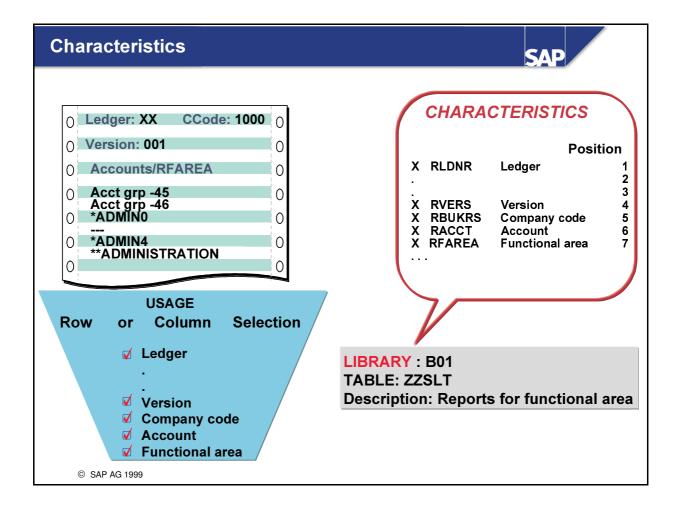




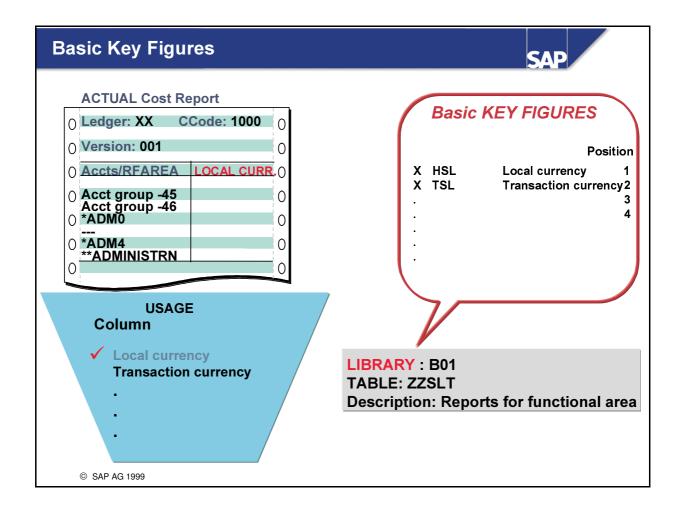
- Using the Report Painter, you can easily evaluate data in FI-SL. You select the characteristics or combinations of characteristics, key figures, and other selection criteria that you want to use in your reports. Using these definitions, the system selects and prepares the report data.
- For the report structures, you can also use the predefined sets (hierarchies) which the Report Painter inserts directly in the report definition.



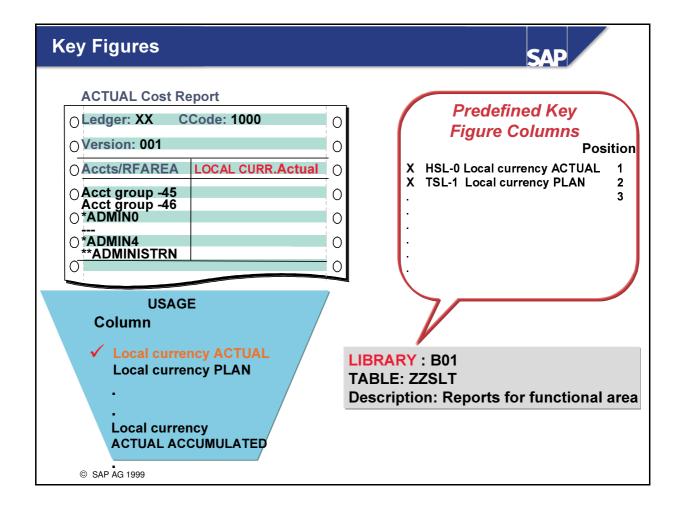
- A library combines reports that have similar contents.
- The library contains the characteristics, key figures, and predefined columns that can be used in your reports.
- Ledger, Version, Fiscal Year, Period, Account, Cost Center, and Functional Area are examples of characteristics. Characteristics are the who, what, where when attributes of a transaction
- Local Currency, Group Currency and Quantity are examples of key figures.
- Actual Local Currency, Group Currency in the Current Period, and Accumulated Local Currency up to Period are examples of predefined columns.
- You create a report for a specific library, insert the report in a report group and then add the report group to a reporting tree.
- Once the report group has been generated, it can be executed.



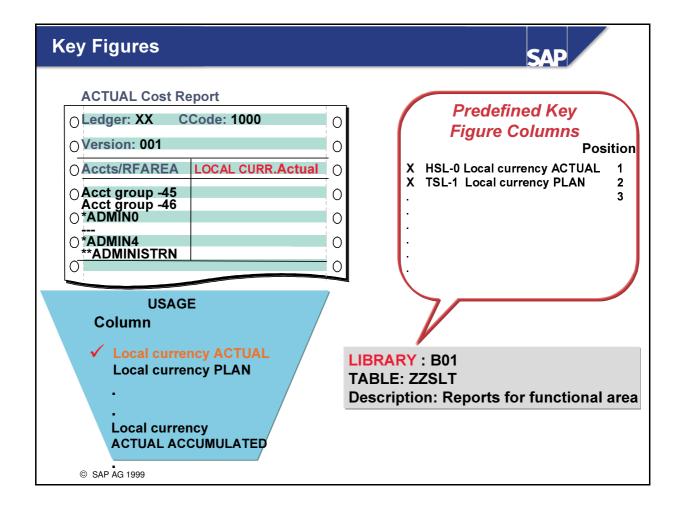
- By selecting a characteristic in the library, you determine whether this characteristic can be used in the reports that use the library.
- The Report Painter allows you to use characteristics in the rows, columns (together with a key figure), or as additional report selection criteria (in the general data selection).
- You can also define the order in which the entries appear in the relevant Report Painter selection lists. This allows you to place the entries that you report on regularly at the beginning of the selection lists.



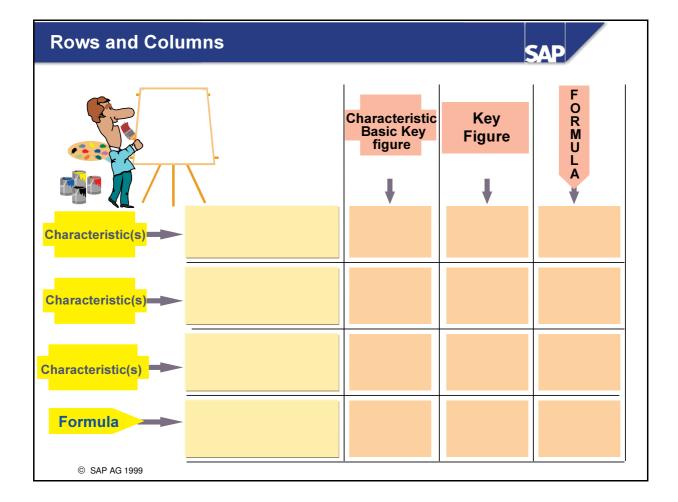
- A key figure is a value field, for example, posted amounts or quantities.
- The key figure definition is the technical description of value fields (for example, local currency).
- You can use key figures in the column definition of your reports.



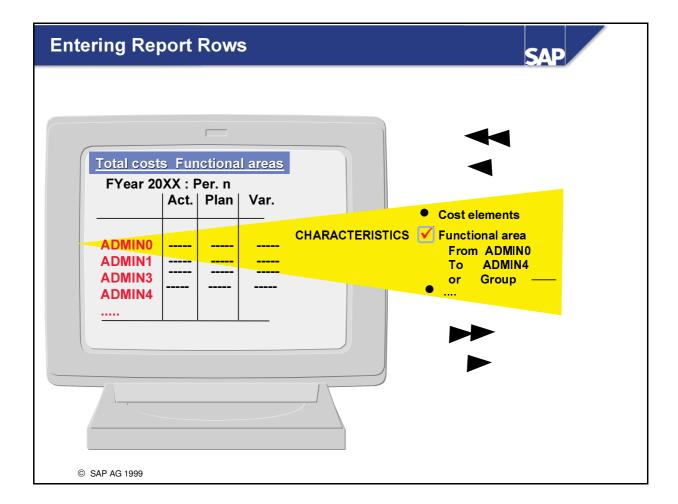
- A key figure can be combined with additional conditions to create a predefined Key Figure column.
- The key figure defines the value field on which you want to report. The additional conditions could be, for example, the record type (actual/plan), the plan version, and so on.



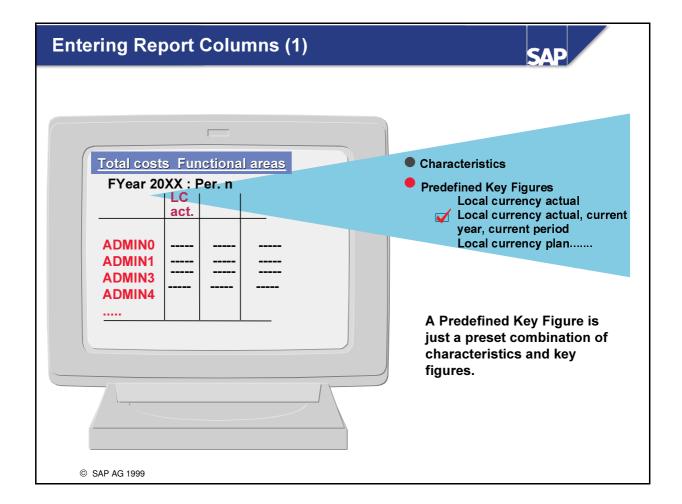
- A key figure can be combined with additional conditions to create a predefined Key Figure column.
- The key figure defines the value field on which you want to report. The additional conditions could be, for example, the record type (actual/plan), the plan version, and so on.



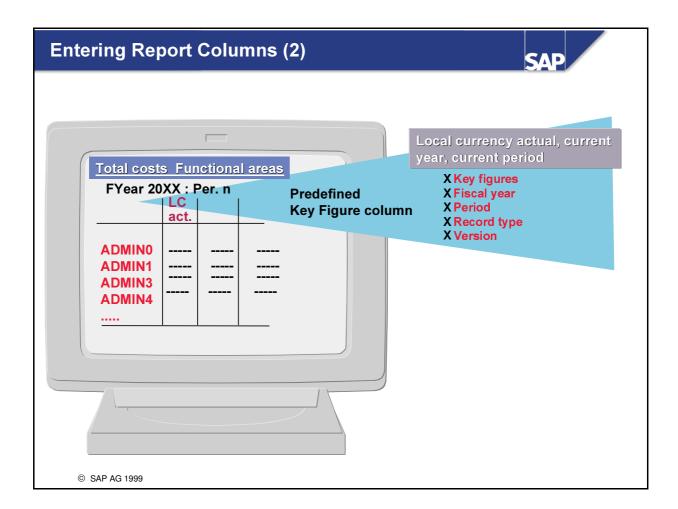
- You can define a row using a combination of characteristic values or a formula. Row formulas can only refer to other rows.
- Columns contain a combination of a key figure (numerical value) with additional optional characteristic values. You can also use predefined Key Figure columns which represent business-related combinations of basic key figures and characteristics (for example, Plan Local Currency, Accumulated To Period, Version XXX).

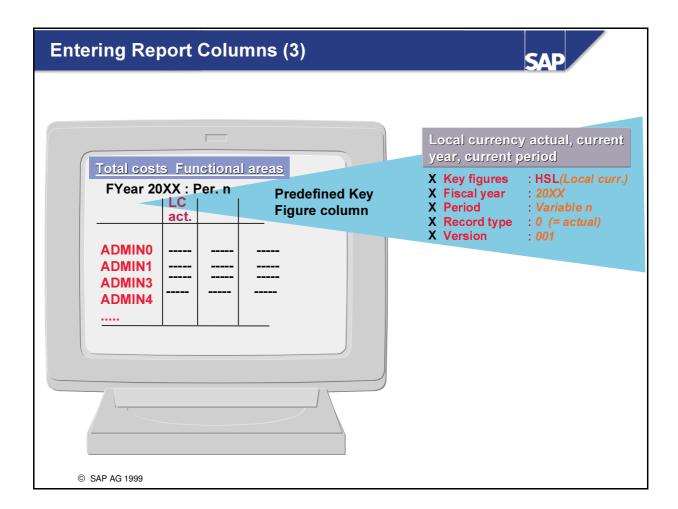


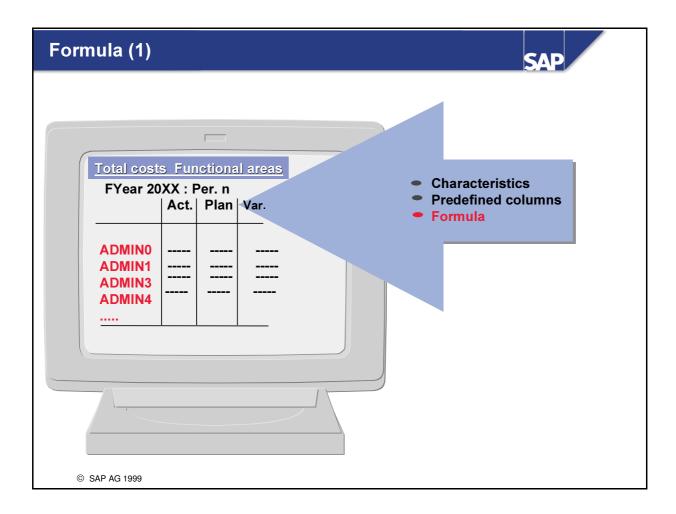
- You select the characteristics that you want to use in your report rows and enter the appropriate values for these characteristics.
- You can enter either a value, an interval of values, a group (set) or a value variable or set variable for each characteristic.

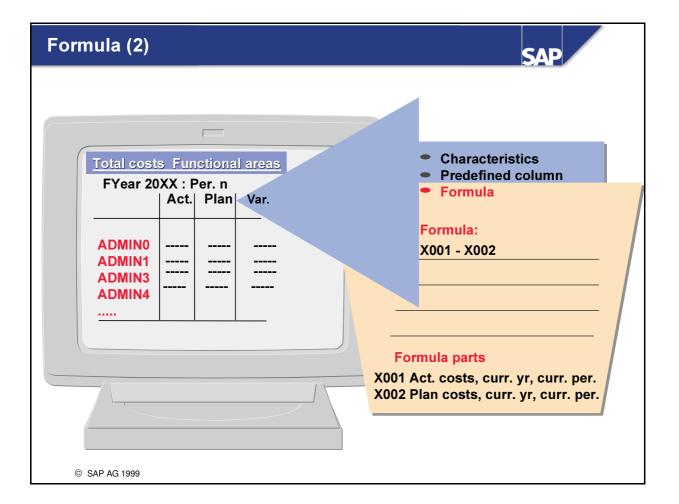


- For the report columns, you select the characteristics that you want to use, together with a specific key figure. Alternatively, you can select a predefined column. If required, you can overwrite the default values.
- You can enter either a value, an interval of values, a group (set), or a value variable or set variable for each characteristic.

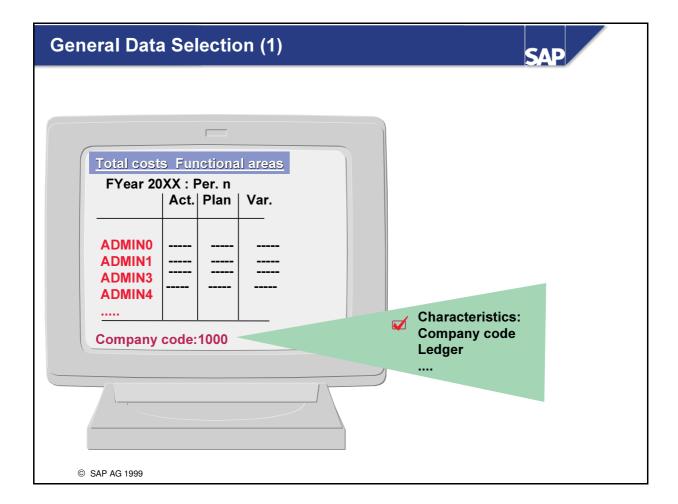




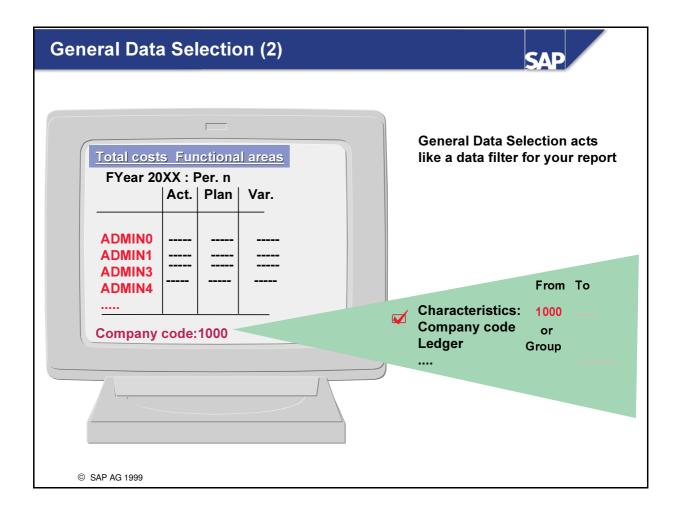


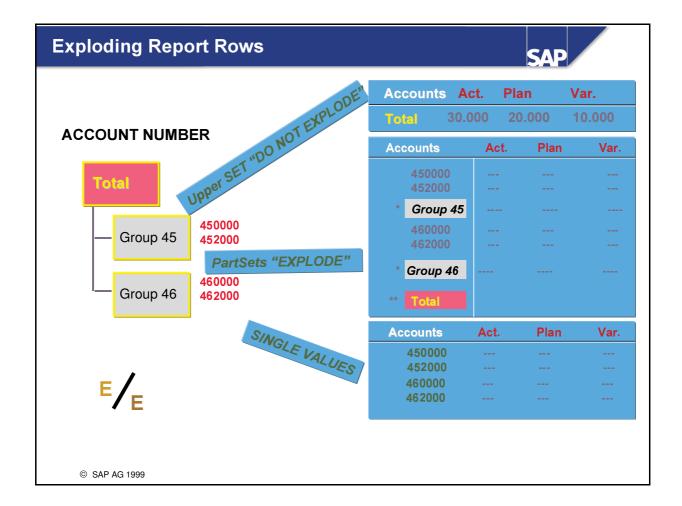


- You can use formulas in a report row or column. The row or column numbers are used as the operands in the formula.
- You use the formula editor to define formulas.

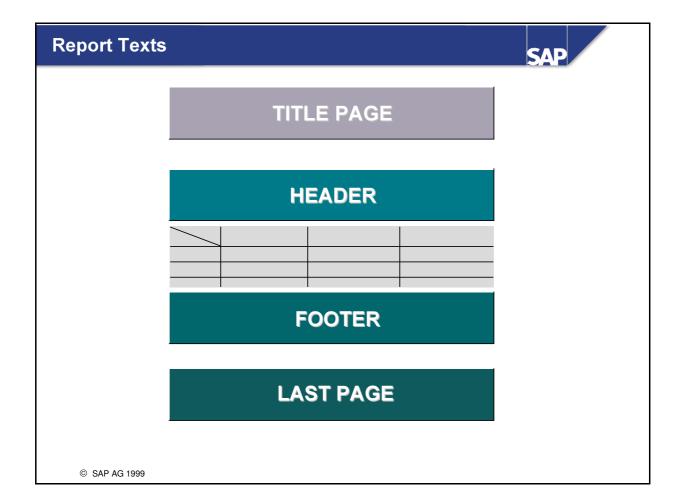


■ After you have defined the rows and columns, you define the characteristics and values that you want to use as general data selection criteria. These are the characteristics that are valid for the entire report and are therefore not used in either the rows or columns.

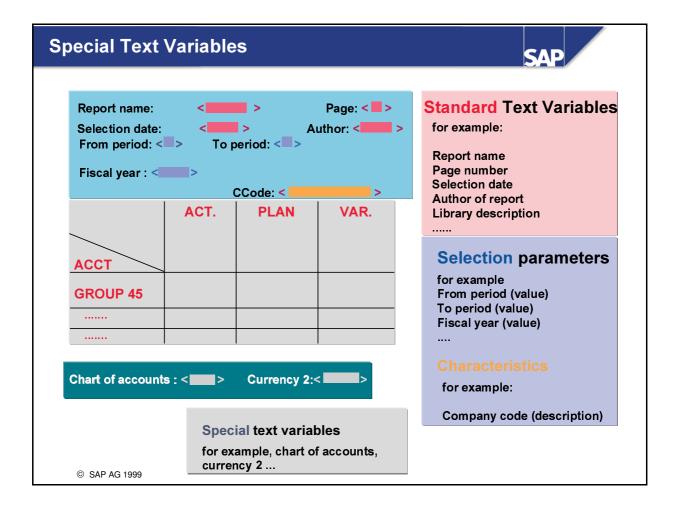




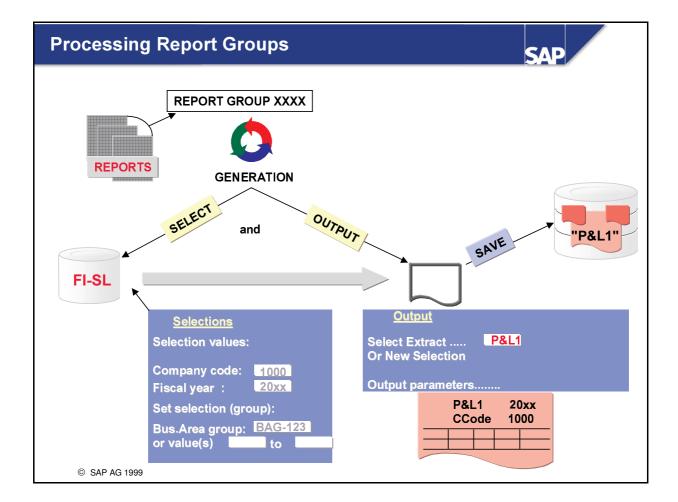
- You can define a row by entering a combination of characteristic values or a formula.
- In the first case, when using groups or several single values you can also determine if:
  - only one summary row is to be displayed
  - the complete group hierarchy with all subtotals is to be exploded or
  - if every single value in a row is to be displayed.



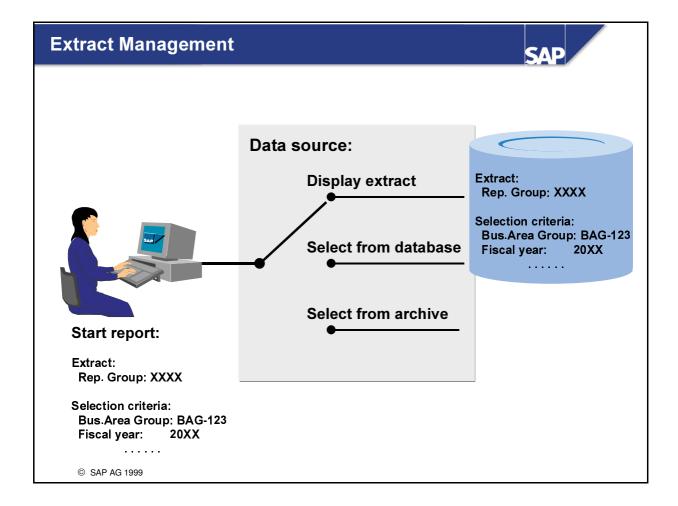
- There are four parts in which you can enter the texts that describe your report definition:
  - Title page
  - Header
  - Footer
  - Last Page



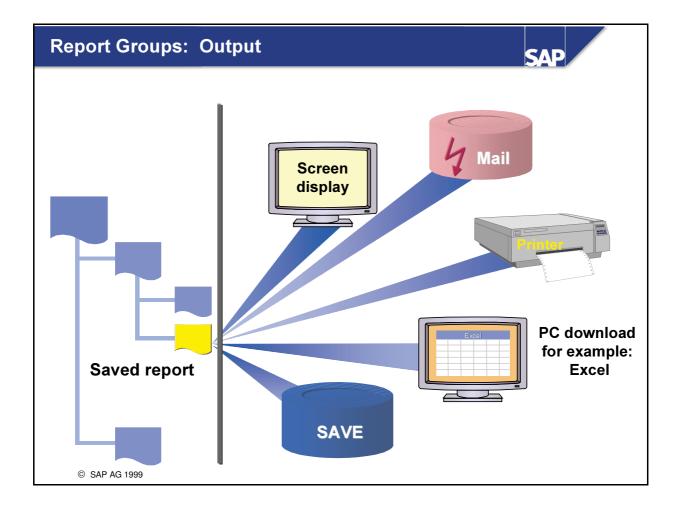
- You can use the following types of text variables:
  - Standard text variables for example, report name, report author and so on.
  - Selection parameters
  - Characteristics
  - Special variables (including master data fields) for example, chart of accounts, fiscal year variant, and so on.



- Your reports are included in a report group.
- A report group usually groups together several reports. The reports must all use the same library.
- The report group is then generated.
- On the basis of the generation, the system creates ABAP reports which can then be executed:
- Data selection: The value or set variables that you have used in your reports are displayed on the selection screen.
- Preparation (output) of the selected data: You can save the selected data (under a specific name) in order to repeat the report output. You can enter a password for this data extract to prevent unauthorized users from accessing it.
- Multiple selection: In case you have used variables in your report definition, you can output several reports by selecting a series of input data.



- Each stored extract is identified by its report group and selection criteria.
- By choosing the data source a user can decide to display extracts (default), select data from the database or from archive files.
- If a user starts a report, the system finds all extracts that match the selection criteria entered by the user.



- You can use the following media for outputting your report results:
  - Screen and printer
  - Text file on the application and presentation server (download to Excel, data transfer to EIS)
  - Mail connection

# **Report Painter: Summary**





 You have learned how to define and execute a report in the FI-SL component

## **Exercises**



**Unit: Report Painter** 

**Topic: Libraries** 



At the conclusion of this exercise, you will be able to:

• Define a Library as a preparation for report definitions



In order to pave the way for the reports that have to be defined, a choice has to be made of the necessary characteristics, key figures and combinations of both (predefined key figure columns) as a framework for the selection of the appropriate data from the FI-SL ledgers

Menu path to use for the definition of a library:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Report Painter  $\rightarrow$  Report Writer  $\rightarrow$  Library  $\rightarrow$  Create

1-1 Define a Library LXX (XX = Group number) to the table ZZSLT which caters for the following characteristics, key figures and predefined columns. The numbering you give to them corresponds to the sequence here:

<b>Characteristics</b>	<b>Basic Key Figures</b>	<b>Key Figures</b>
RLDNR (pre-selected by system	n)HSL	HSL-0
RRCTY	KSL	HSL-1
RVERS		HSL-2
RYEAR		KSL-0
RBUKRS		KSL-1
RACCT		KSL-2
RBUSA		
RFAREA		
RZZLOB		
RMATNR		
SZZLOB		
DRCRK		
RPMAX		

#### 1-2 Report Definition

#### Menu Path:

 $SAP\ Easy\ Access\ o Activity\ Group\ SL: Reporting\_analyst o Special\ Purpose\ Ledger\ o Tools\ o Report\ Painter\ o Report\ o Create$ 

XX = your group no.

1-2-1 Create the following report to your Library LXX:

Report: **GXX-REP1** ('Lines / Products: Act. Group curr.')

Sample Result: GXX-REP1

	Actual Group Curr Vers1	Actual Group Cur Vers2	Total (Vers 1+2)
T-IC-F1001			
T-IC-F1002			
T-IC-F1003			
T-IC-F1003			
T-IC-R2007			
T-IC-R2008			
T-IC-R0009			
PTRO 1			
T-IC-F1001			
T-IC-F1002			
:			
CHEM 1			
:			
COMM 1			
Line of Business			

General Selection: Your Ledger, Co-Code ACXX, Current Year, Actual Period

Before you save the report you should check your definition.

Assign your report GXX-REP1 to the Report Group RGXX (XX = your group number)

In the header of the group you should enter the name of the ABAP report that will enable us to drilldown from the totals to the single items

(Entry: **ZZSLITEM**)

Execute your report, view the output and then select a block for a drilldown to the single items.

1-2-2 Create the following report to your Library LXX: **GXX-REP2** (*'Functional Areas/Expense Accounts:* Report: Local act. curr.') Sample Result: **GXX-REP2:** Report name: **GXX-REP2** Page: XX / XX Company Code: **ACXX** Fiscal Year: **20XX** Current Period: XXVersion: Ledger: AA(or..RR) Local Currency Actual 420000 421000 Wages 430000 431000 Salary 472000 476000 General Expense **SALES** 420000 421000 Wages General Expense **ADMINISTRATION** R & D **FUNCTIONAL AREAS** Selection Date: Author: AC220-XX XX/XX/20XX Your Row should include the Basic Set to Functional Area and the Set Variable to Account number. General Selection: Your Ledger, Version 1, Your Company Code, Fiscal year (Variable), Actual Period (Variable) Your Report GXX-REP2 should be assigned to the same Report Group as your previous report. After you execute your report, group, navigate to this second report, view

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the results and drilldown to the single items for the selected block.

## **Solutions**



**Unit: Report Painter** 

**Topic: Libraries** 

Menu path to use for the definition of a library:

Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SPecial\ Purpose \ Ledger 
ightharpoonup Tools 
ightharpoonup Report\ Painter 
ightharpoonup Report\ Writer 
ightharpoonup Library 
ightharpoonup Create$ 

1-1 Define a Library LXX (XX = Group number) to the table ZZSLT which caters for the following characteristics, basic key figures and predefined key figure columns. The numbering you give to them corresponds to the sequence here:

Header:

Description :Library LXX

Since the system has already selected all of the Key Figures(Basic Key Figures) and Predefined Columns (Key Figures), go to the Key Figures screen after you have selected your characteristics and deselect all Key Figures. Return to the Basic Key Figures screen and repeat. The select the items listed below.

<b>Characteristics</b>	<b>Basic Key Figures</b>	<b>Predefined Columns</b>
RLDNR (pre-selected)	HSL	HSL-0 (the 0, 1,2 1
RRCTY	KSL	HSL-1 correspond
RVERS		HSL-2 to Doc Types
RYEAR		KSL-0 in SPL)
RBUKRS		KSL-1
RACCT		KSL-2
RBUSA		
RFAREA		
RZZLOB		
RMATNR		
DRCRK		
RPMAX		

In the header of the library you should enter the name of the ABAP report that will enable us to drilldown from the totals to the single items

(Entry: **ZZSLITEM**)

*Library:* LXX (XX = your group no.)

Table: **ZZSLT** 

Header:

## Description: Library for Group XX Reports

Characteristics:	
Name	Position
RLDNR	1
RRCTY	2
RVERS	3

RYEAR 4 RBUKRS 5

RACCT 6
RBUSA 7

RFAREA 8
RZZLOB 9

RMATNR 10 DRCRK 11

RPMAX 12

## Basic Key Figures

Name Position
HSL 1
KSL 2

#### Key Figures

 Name
 Position

 HSL-0
 1

 HSL-1
 2

 HSL-2
 3

 KSL-0
 4

 KSL-1
 5

 KSL-2
 6

Save Library.

## → Change Library

Header:

Report/report interface

Configure

Assign reports

Insert line

#### $\rightarrow$ Other report type

Double click on RT ABAP/4 Reports

Insert Program name ZZSLITEM

Save

Save library.

#### 1-2 Report Definition:

#### Menu Path:

SAP Easy Access → Activity Group SL:Reporting\_Analyst → Special Purpose Ledger > Tools > Report Painter > Report > Create

XX = your group no.

### 1-2-1 Create the following report to your Library LXX:

Report: GXX-REP1 ('Lines/Prods Actgrp)

Sample Result: **GXX-REP1** 

	l Group Curr Vers1	l Group Cur Vers2	(Vers 1+2)
T-IC-F1001			
T-IC-F1002			
T-IC-F1003			
T-IC-F1003			
T-IC-R2007			
T-IC-R2008			
T-IC-R0009			
PTROXX1			
T-IC-F1001			
T-IC-F1002			
:			
CHEM 1			
:			
COMM 1			
:			
of Business			

General Selection: Your Ledger, Co-Code ACXX, Current Year, Actual Period

Before you save the report you should check your definition.

Assign your report GXX-REP1 to the Report Group RGXX (XX = your group number)

Execute your report , view the output and then select a block for a drilldown to the single items.

Library: LXX

Report: GXX-REP1 Lines/Prods Actgrp

Continue

In 'Lead column' Insert 'Lines/Products'

Double click on Row 1:

**Choose Characteristics:** 

**Business Line** 

Material

Business Line Select the First @

Group: GXX-ZZLOB

Material. Select the first @

Group: GXX-PRODUCTS

Select the **Change Short Middle and Long Text** Icon at the bottom of the dialogue box

Enter texts:

Short: LINES/PRODS

Medium: Lines/Products

Long: Lines of Business/Products

Continue

Position cursor on Row 1 and double click on ICON 'Explode'

Sort Characteristics:

Explode Single Values

1. Business Line x

2. Material x

Continue.

Double click on Column 1

Select Element type:

Predefined Key Figure

Group currency act.

Confirm the selection of Key figures

Group. currency

Choose characteristics:

Record type 0

Short text: Grp.act V1

Medium text: Group curr act Vers.1

Long Text: Group currency act. Version 1

Continue

Double click on Column 2

Select Element type:

Predefined Key Figure

Group currency act.

Key figures

Group currency

Record type 0

Version 002 (Add Characteristics)

Short text: Grp.act V2

Medium text: Group curr act Vers.2

Long Text: Group currency act. Version 2

Continue

Double click on Column 3

Select Element type:

Formula

Enter Formula:

X001 + X002

Continue.

**Texts** 

Short: Total V1+2

Medium: Total Version 1&2

Long: Total Version 1&2

Continue

 $\rightarrow Edit$ 

Gen. .data selection:

Change

Pick Characteristics:

Ledger

Fiscal year

Company code

Period

Continue

Enter Characteristic Values:

Ledger: your Ledger

Fiscal year: Current year

Company code: your Company Code ACXX

Period: Current Period

Continue.

Check your report.

 $\rightarrow$  Report  $\rightarrow$  Check

Save your report.

Assign your report to a report group:

 $\rightarrow$  Environment  $\rightarrow$  Assign report group

Report group:  $\mathbf{RGXX}$  (XX = your group no.)

Continue. Confirm creation

Execute.

 $\rightarrow$  Report  $\rightarrow$  Execute

Lines/Prods Actgrp: Selection

Execute:

View the output and then select a block for a drilldown to the single items.

1-2-2 Create the following report to your Library LXX:

Report: GXX-REP2 ('F Areas/Expense Local act..')

Sample Result: **GXX-REP2:** 

Report name: **GXX-REP2** Page: XX / XX

Co.Code: ACXX

Fiscal Year: 19XX Current Period: XX

Ledger: AA(or..RR) Version: 1

Local Currency Actual Fareas/Expense 420000 421000 Wages 430000 431000 Salary 472000 476000 General Expense **SALES** 420000 421000 Wages :: General Expense **ADMINISTRATION** R & D **FUNCTIONAL AREAS** AC220-XX Section Date: XX/XX/19XX Author: Your Row should include the Basic Set to Functional Area and the Set Variable to Account number. General Selection: Your Ledger, Version 1, Your Company Code, Fiscal year(variable), Actual Period (Variable)

Your Report GXX-REP2 should be assigned to the same Report Group as your previous report.

After you execute your report, group, navigate to this second report, view the results and drilldown to the single items for the selected block.

-----

Library: LXX

Report: GXX-REP2 FAreas/Expense Local act.

Continue

In 'Lead column' Insert 'Fareas/Expense'

Double click on Row 1:

Choose Characteristics:

Account number

Functional area

Account number

Group: Variable on

Group: GXX-ACG (Set Variable)

Functional area

Group: GXX-FAREAS (Basic Set)

Enter texts:

Short: FAREA/Acct

Medium: FAREAS/Expense

Long: FAREAS/Expense Accounts

Continue

Position cursor on Row 1 and double click on ICON 'Explode'

**Sort Characteristics:** 

Explode

1. Functional area x

2. Account number x

Continue.

Double click on Column 1

Select Element type:

Predefined Key Figure

Local currency act.

Key figures

Local currency

Choose characteristics:

Record type

Version

Record type 0

Version 001

Short text: Loc.curr.act

Medium text: Local curr.actual.

Long Text: Local currency actual

Continue

 $\rightarrow Edit$ 

Gen. .data selection:

Change

Pick Characteristics:

Ledger

Fiscal year

Company code

Period

Continue

Enter Characteristic Values:

Ledger: your Ledger

Fiscal year: GXX-FYR (Value Variable)

Company code: **GXX-CCD** (Value Variable)

Period: **GXX-PER** (Value Variable)

Continue.

Save your report.

Texts:

 $\rightarrow$  Extras  $\rightarrow$  Report texts

Headers

Choose 'Standard variables' for

Report Name, Page number and, Total number of pages

Choose 'Selection parameters' for

Company Code, Year and Period

Choose 'Characteristics' for

Ledger, and Version

Footer

Choose Standard Variables for

Author and Date of Selection

Save your Texts

Check your report.

#### $\rightarrow$ Report $\rightarrow$ Check

Save your report.

Assign your report to a report group:

## $\rightarrow$ Environment $\rightarrow$ Assign report group

Report group:  $\mathbf{RGXX}$  (XX = your group no.)

Continue. Confirm.

Execute.

#### $\rightarrow$ Report $\rightarrow$ Execute

FAreas/Expense Local act: Selection

On the Selection Screen accept the prompts for the variables you have used.

Execute

View the output of the second report:

## $\rightarrow$ Goto $\rightarrow$ Other report

and then select a block within this second report for a drilldown to the single items.

# **Planning**



### **Contents:**

- Planning Settings: Overview
- Plan Periods
- Plan Versions and Version Parameters
- Plan Line Items
- Distribution Keys
- Exchange Rates and Translation
- Planning Layouts
- Planner Profile
- Entering Plan Values
- Planning Template

# **Planning: Objectives**





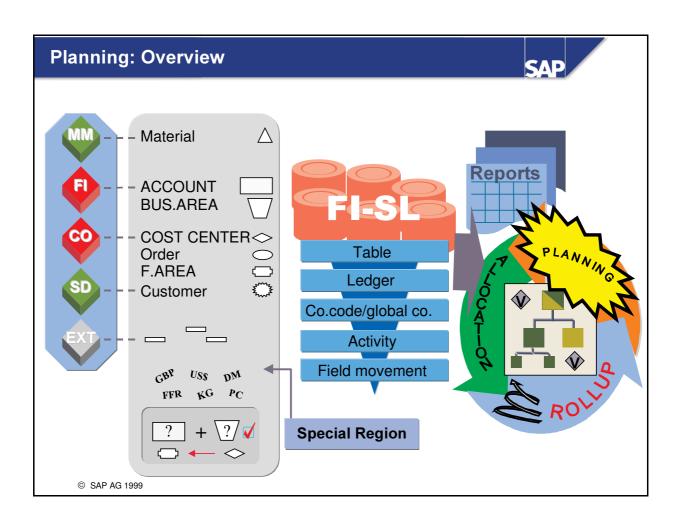
 At the completion of this unit, you will have learned how to make the most important planning settings and will be familiar with essential FI-SL planning functions.

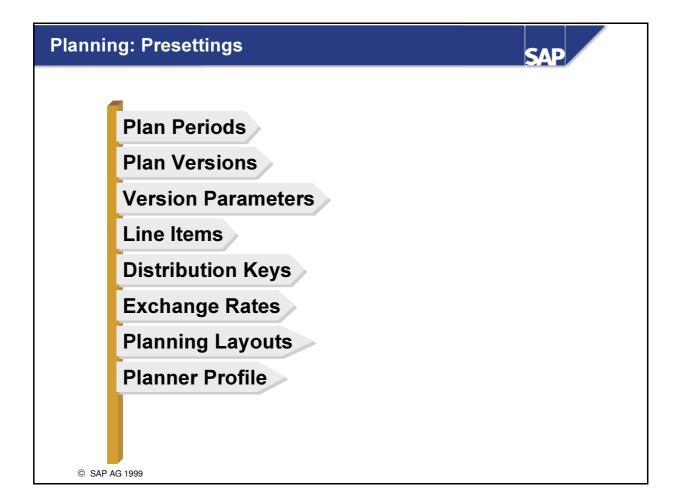
## Planning: Business Scenario



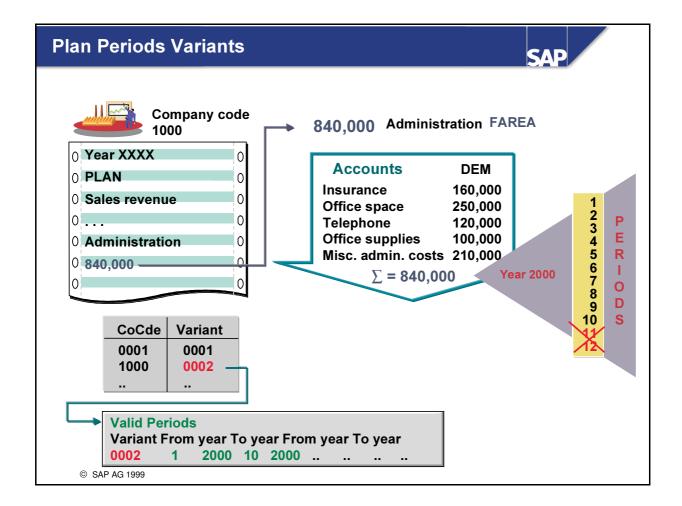


- Field managers have to present to the corporate group the revenue and expense plans for each geographical area for which they have responsibility.
- Using FI-SL planning, they must present detailed monthly plans for various revenue and expense categories. Plans are to be in both local and group currency and based upon the seasonal fluctuations of their geographical areas.

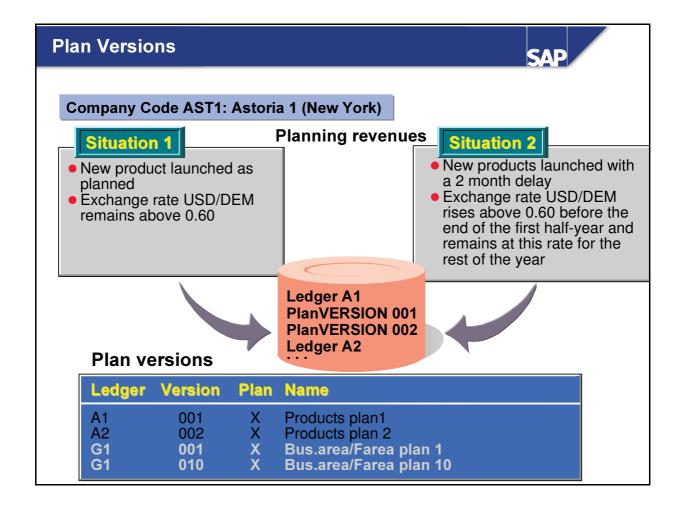




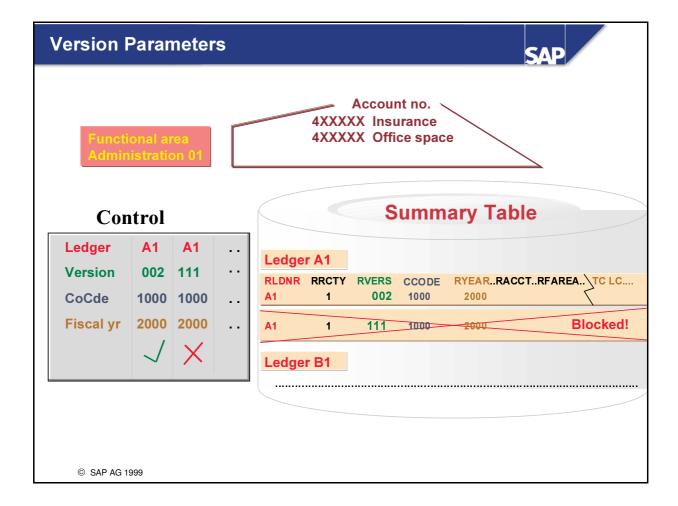
■ FI-SL has its own planning functions for entering planning data



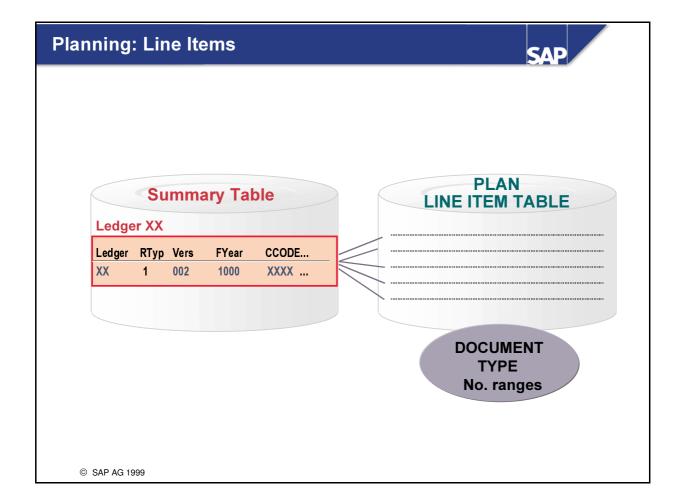
- You must specify valid plan periods for your company codes or global companies.
- You can define two ranges of valid periods.



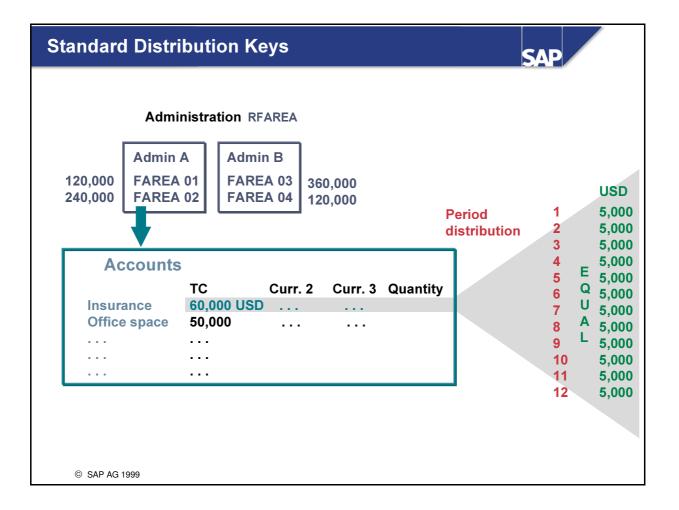
- Each ledger can store any number of planning data versions.
- This allows you to compare plannings based on different values and quantities.
- These plan versions can then be evaluated using the Report Writer with/without actual results.



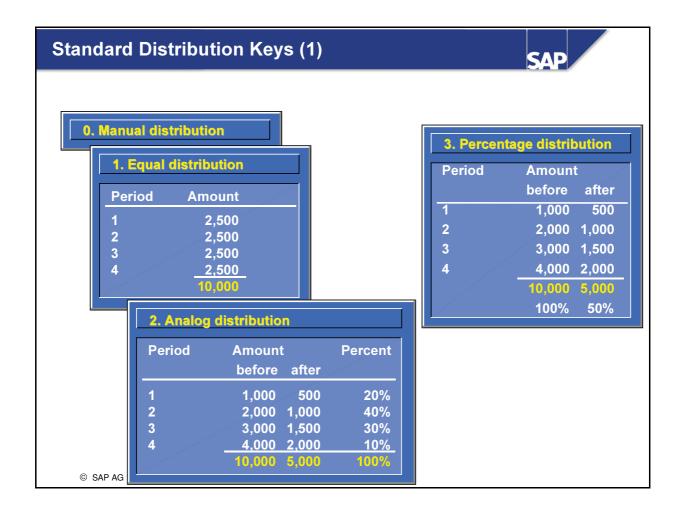
- Planning in FI-SL is carried out for local ledgers (company code) or global ledgers (global company).
- After choosing a plan version, you must specify whether planning is allowed for a specific fiscal year for the combination of ledger, version, and company code (or global company).



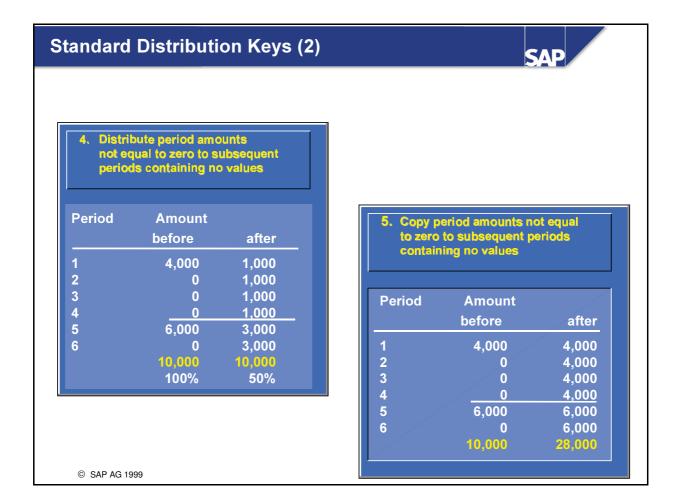
- Using the Activate Line Items function, you can decide whether you want to update plan line items in your plan summary records.
- The line items document the plan changes.
- You need a document type for plan line items.
- The document type controls document number assignment, among other things.
- If you already have a planning total balance that would be updated without line items, this balance can be transferred as line items.



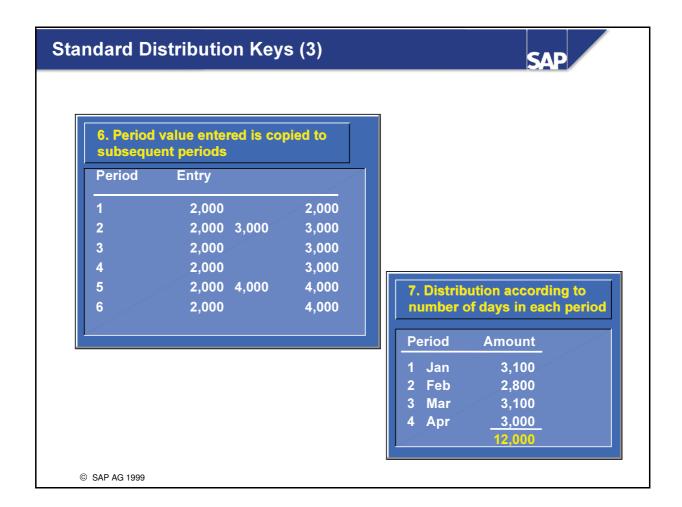
- A distribution key is used to distribute the planing totals to the individual periods.
- You can work with the standard distribution keys that are delivered with your system, for example:
  - Equal distribution
  - Analog distribution
  - Percentage distribution
  - Distribution or copying of values to the next empty periods
  - Distribution according to the number of days in a month



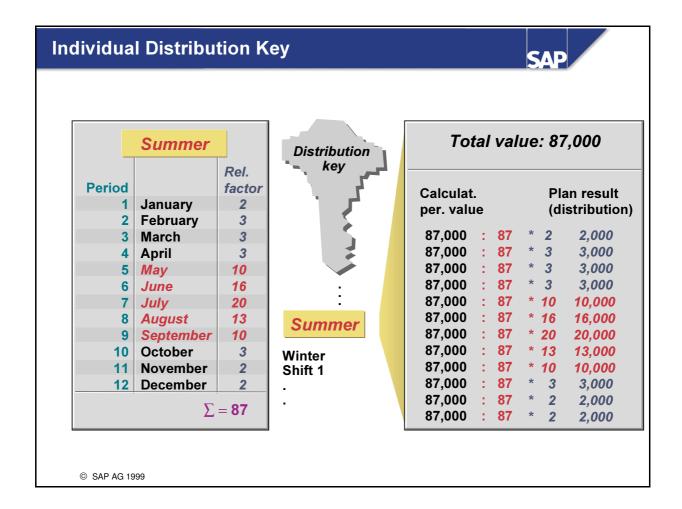
- Seven distribution keys are already defined in the system. They have been defined as an aid for entering and distributing total values:
  - 0 = Manual distribution
  - 1 = Equal distribution
  - 2 = Distribution as before
  - 3 = Percentage distribution



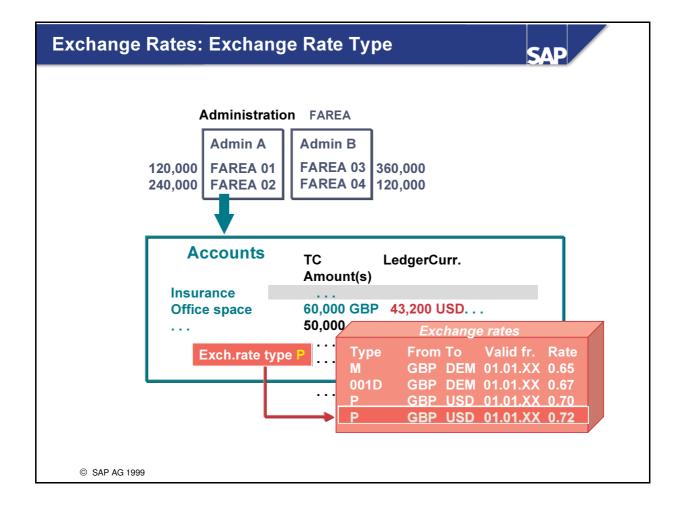
- Seven distribution keys are already defined in the system. They have been defined as an aid for entering and distributing total values:
  - 4 = Distribution of period amounts not equal to zero to subsequent periods containing no values
  - 5 = Copying of period amounts not equal to zero to subsequent periods containing no values



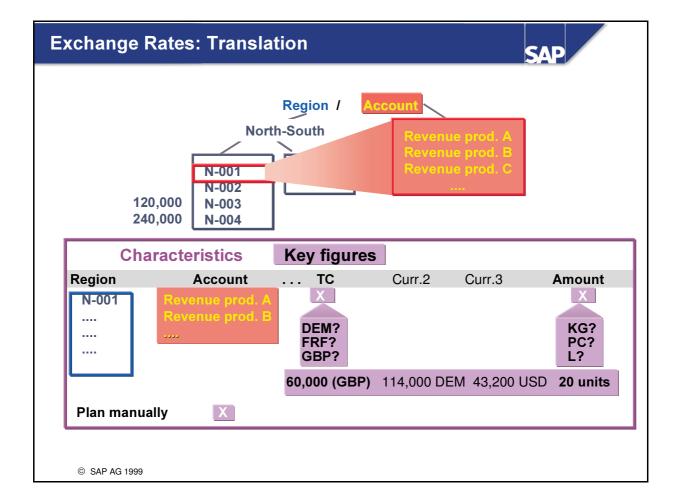
- Seven distribution keys are already defined in the system. They have been defined as an aid for entering and distributing total values:
  - 6 = Copying of period amounts to subsequent periods
  - 7 = Distribution according to number of days in each period



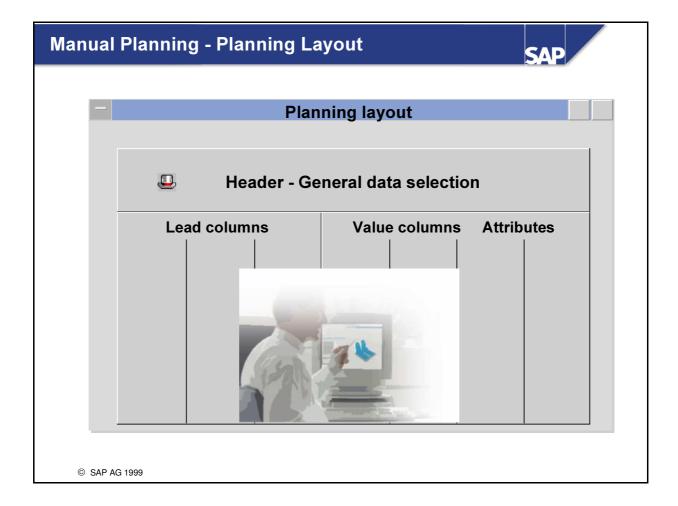
- With company-specific distribution keys, you can define relative factors for each planning period. The system interprets the value entered as the total planning value and distributes this value to the individual planning periods in accordance with the relative factors.
- This allows you to take into account seasonal fluctuations, shift schedules, or other weighting criteria.
- Distribution keys are entered as default value before planning, or you can enter them during planning.



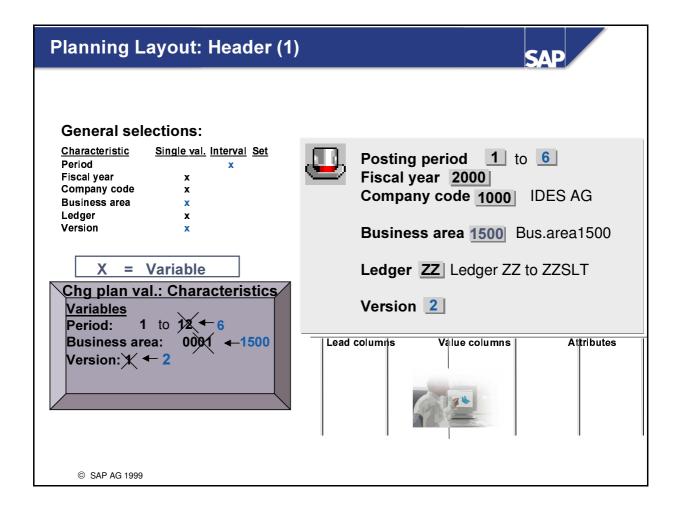
- For currency translation in FI-SL planning (transaction currency -> currency 2/currency 3) you are able to enter your own exchange rates in the currency table. You can then differentiate these further with an exchange rate type.
- With entry of the plan value, the currency table is read in conjunction with the exchange rate type. Exchange rates are determined for each planning period (the start date of the period is important).



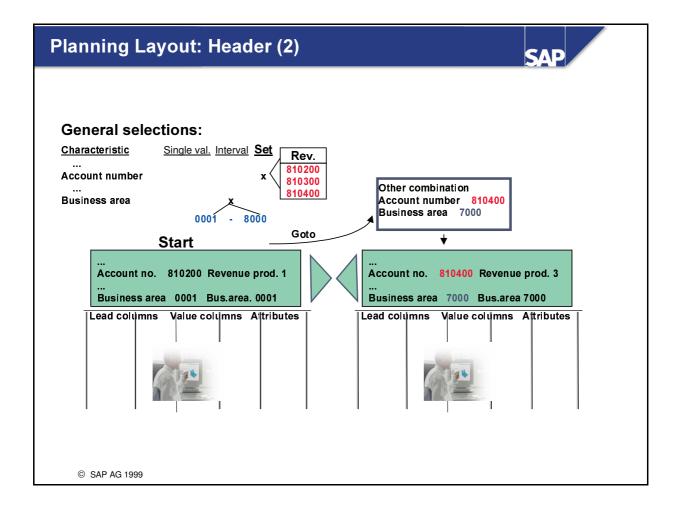
- You can store planned values in transaction currency, second, and third currency for the characteristics being planned. You can also store planned values in quantities and additional quantities (provided these are maintained in the corresponding ledger).
- You can decide which currency field groups are to be planned manually.
- The key figures (currencies) entered in the layout that are not planned manually are determined automatically from translation of TC -> C2/C3 (currency table). In the above example, transaction currency amount 60,000 GBP is translated into currency 2, 114,000 DEM, using exchange rate 1.90, and into currency 3 (ledger currency, for example), 43,200 USD, using exchange rate 0.72.



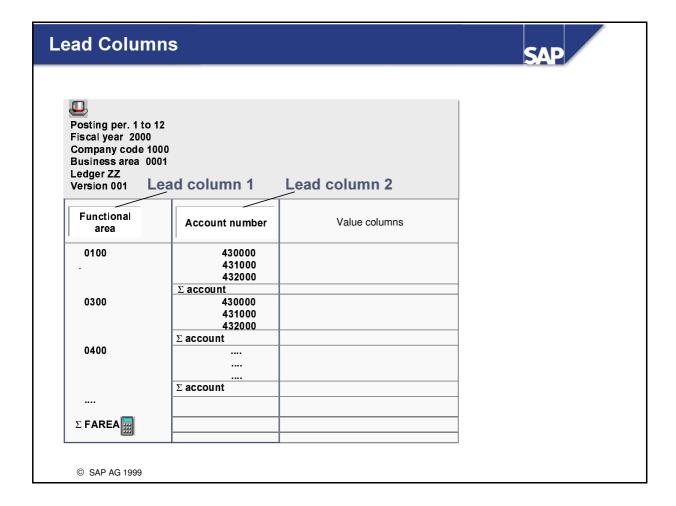
- In FI-SL, planning data is entered on entry screens. It is possible to tailor the user-interfaces of these screens with Customizing settings. These entry screens are called planning layouts.
- Planning layouts can be structured with a great degree of flexibility. This ensures that entry of the planning data is simple, and that ergonomic factors can be considered. The Report Painter can be used to define planning layouts.
- A planning layout consists of a header and several lead and value columns.
- You enter the selection criteria in the header, and determine the characteristics that are displayed in the header.
- In the lead column, you define the characteristics that you want to plan.
- The following options are available for definition of the value columns:
  - You can enter columns either with a key figure and characteristics or with key figures only. The key figures are contained in your tables. These are TSL (transaction currency), HSL (currency 2), KSL (currency 3), MSL (quantity) and ASL (additional quantity).
    - A formula column is a value column displaying calculated results from other value columns.
    - In an attribute column you have the options for the unit and the distribution key. The unit and the distribution key are displayed as additional fields in a column.
- You define planning layouts in FI-SL Customizing.



- You define characteristics and characteristic values that are valid for all rows and columns of the layout via General selections, (for example, the values of a version, if the layout refers to only one version. General selections simplify definition and prevent errors, as well as helping to provide clarity in your layout.
- A characteristic selected for the header area is no longer available for the definition of rows and columns.
- To determine the order in which the characteristics are displayed on the entry screen in the header area, choose Edit -> General selections -> Header layout. Note that a maximum of 9 selected characteristics can be displayed in the header area for each layout.
- You can define characteristic values as follows:
  - Specification of set characteristic values
  - Entry of "\*". All valid values are displayed for a characteristic.
  - Parameterization of the characteristic values with variables. Variables serve to make the layout more flexible. You determine the default values when you define the default parameters for your layout in the plan task. There, you can determine whether these default values can be overwritten during creation of your planning data.



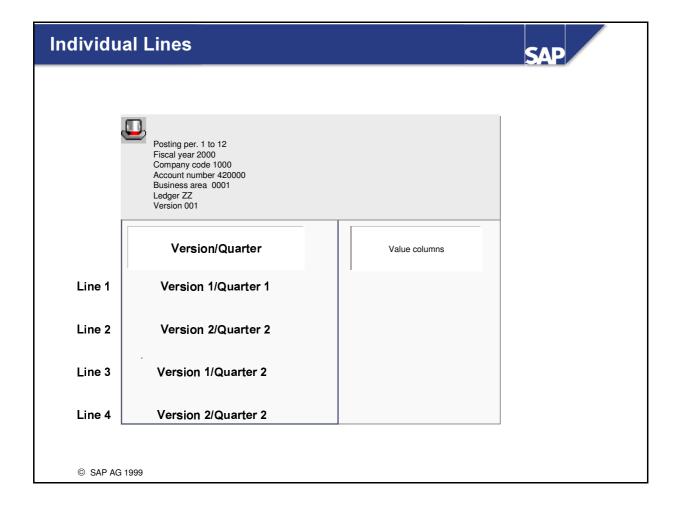
- As well as individual values for your characteristics in the header area, you can also use intervals of values or sets.
- In this instance, during the creation of your planning values, you can either scroll from value to value or display a list of characteristic values in your intervals or sets and select the values there for which you want to enter the planning values.



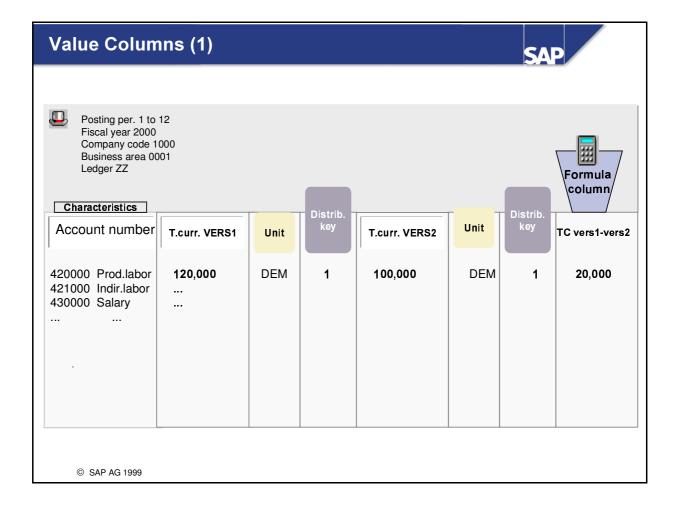
- Definition of one or more lead columns with the header
  - You can define exactly one characteristic for each lead column. If you choose to define the lead column via elements, the system suggests all characteristics that have not yet been used. For this characteristic, you can choose a value, a variable, an interval of values (or variables), a set, or "\*" (all values).
- If, for example, you select the characteristic "functional area" in the first column and "Account" in the second column, the "functional area/account" combinations for which data exist are displayed during planning.
  - Planning example

•	Lead column 1	Lead column 2	Value column
•	Functional area	Account	Local currency
•	0100-0500	430000-432000	

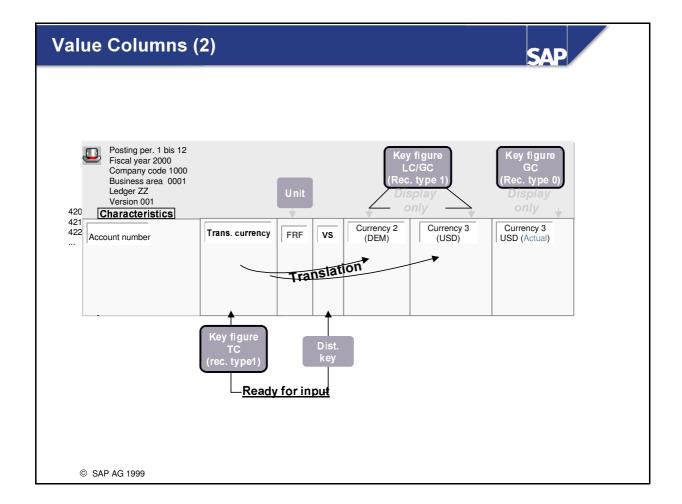
■ Each new lead column is inserted before the lead columns that have already been defined. To arrange the lead columns afterwards, choose Edit -> Columns -> Sort lead columns.



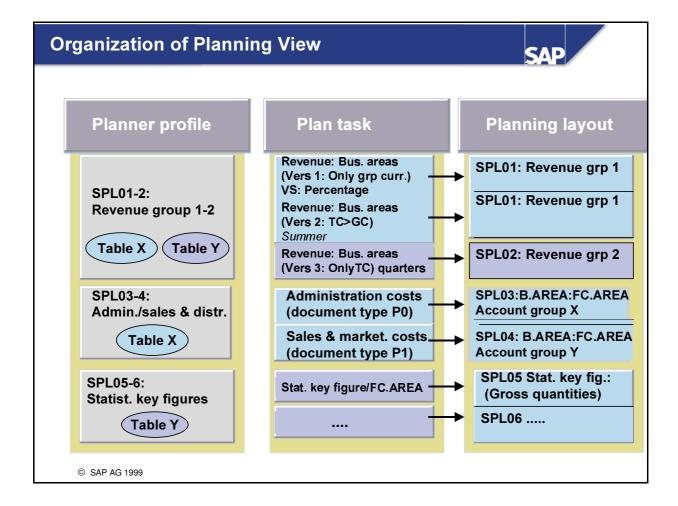
- <u>Definition of exactly one lead column via the rows</u>
  - This type of definition involves defining each row separately. You can define a key figure or formula for each row or characteristic. Definition is the same as with value columns.
- Example for quarter planning (above):
  - <u>Lead column</u> Value column
  - Version/Quarter Local currency
  - Version 1/Quarter 1
  - Version 2/Quarter 1
  - Version 1/Quarter 2
  - Version 2/Quarter 2
    - (Quarter 1 is defined via interval period 1 to 3.)



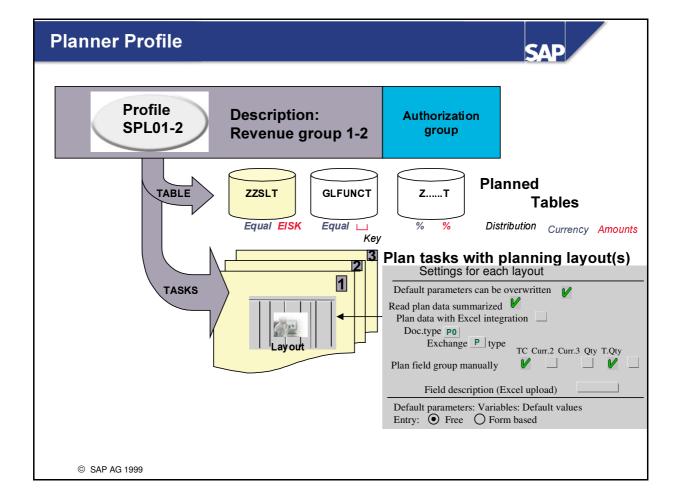
- <u>Definition of a normal column with characteristics or key figures</u>: Value columns are defined with key figures, (transaction currency, currency 2, currency 3, quantity, or additional quantity). You determine whether you display the value fields in the rows or columns when you define the first element of the layout. If you define a value field in a row or column, you can define this further with characteristics. Intervals of characteristic values are not permitted in a column.
- Definition of an attribute column: The following attributes are available:
  - Distribution key: You use this to distribute cumulative values to the period values. You can, for example, represent seasonal trends in the periods of a fiscal year using the distribution key. If no distribution key is selected, the system distributes in an analogous fashion. In other words, if no data is available, data is distributed evenly, and when data is available, it is distributed analogous to this.
  - Unit: You assign a value field to a currency or quantity.
    - If you select the attribute unit, when planning is carried out, this field contains either the quantity or the associated currency, depending on the assigned value field. If you have defined various characteristics or characteristic values in your columns, you have to define the characteristics with the relevant characteristic values again, during definition of the distribution key and unit attributes.
- Formula in the layout: You can define formula columns and rows consisting of the values of already defined columns. These formulas are automatically set to not ready for input.



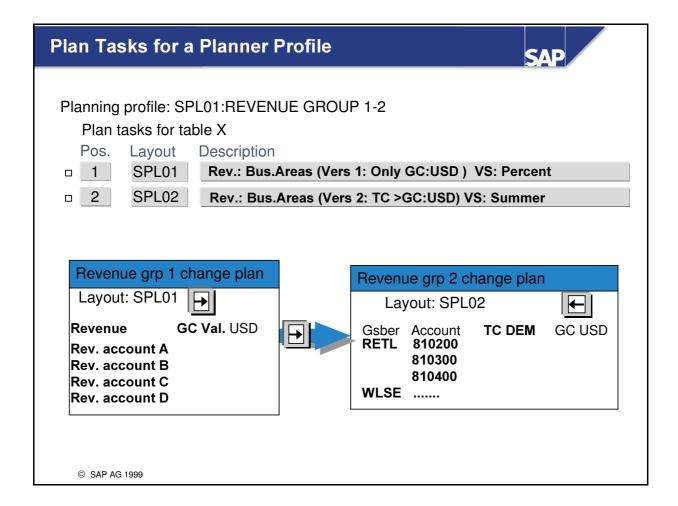
- You have to define value columns that you merely want to display (and not fill with plan values) as not ready for input. If, for example, you want to plan the transaction currency, and you do not wish to plan currency 2 and/or currency 3 manually but rather just want to display the translated plan values, you flag these columns as not ready for input. You do this via Format -> Ready for input.
- If you want to display the actual values for a key figure, you have to include the record type 0 for this column. In this case, you have to determine the record type for plan data for the other columns. If all columns are to display plan data, you can enter record type "Plan" as "common denominator" in General selections.



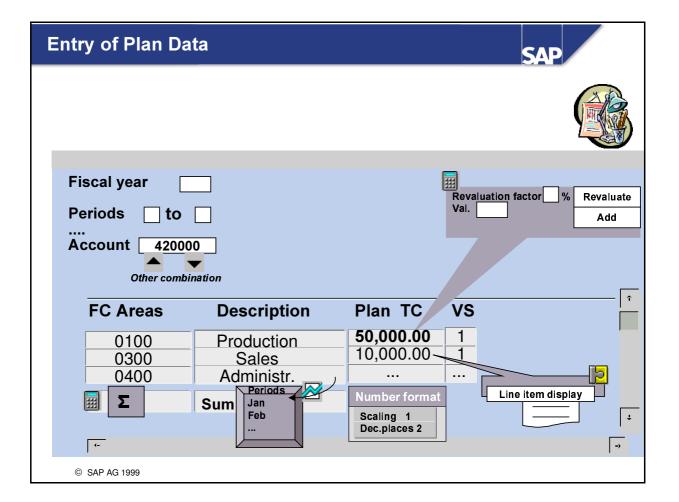
- A planner profile controls the planning schedule. In a planner profile, you specify for each table which planning tasks are used with which default parameters.
- You can create as many planning tasks as you wish for each table. It is possible to assign the same planning task to a planner profile more than once, provided that different default parameters are used on each occasion.
- The structure of planner profiles is hierarchical:
  - General planner profiles
  - Planned tables
  - Planning tasks for the table
  - Planning layouts with default parameters



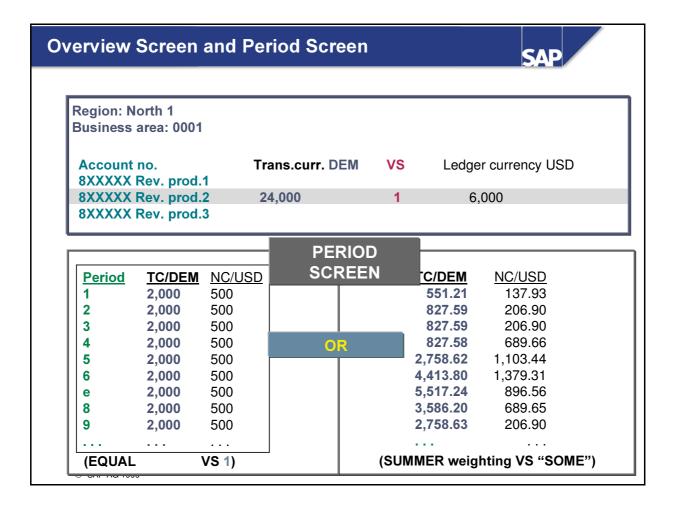
- You can assign an authorization group to each planner profile. You can assign differentiated authorizations for the creation of planning data through the combination of authorization groups and default parameters that cannot be overwritten.
- You assign summary tables to each planner profile that you want to use as the basis for your planning. You can store distribution keys as default value for currency and quantity fields for each assigned table.
- You assign planning tasks to each table. The position is used to determine in which order the planning tasks are done.
- The indicator for default parameters specifies whether default parameters were created for your plan task. You are able to determine whether your default parameters can be overwritten during planning. If the indicator is set, the default values are merely proposals that you can overwrite during planning. If this indicator is not active, the preassignment cannot be changed.
- You can specify whether your plan data is read summarized.
- With Excel integration, you determine whether Excel can be used to create plan data. If Excel integration is activated, you must enter a file name in the file description field.
- You can enter the document type for plan line items.
- You can specify which of the fields for currencies and quantities included in your planning layout are ready for input during planning.
- Default parameters: You can assign default parameters to each planning task. Enter the desired values. These appear as default values on the planning initial screen.



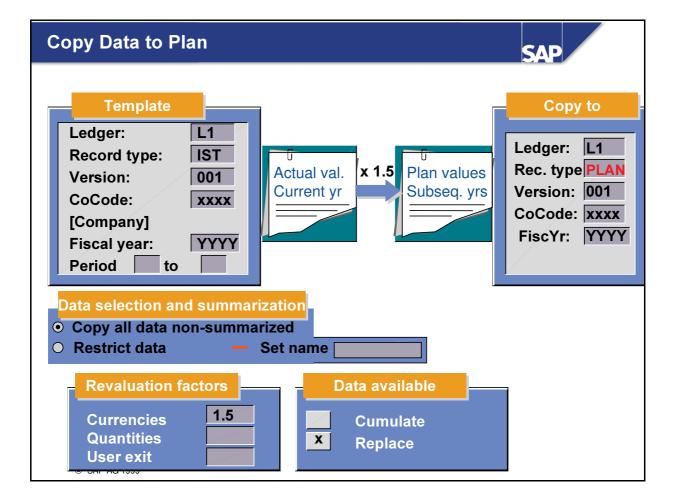
- When you carry out planning, you set your planner profile and the summary table for entry of your planning data. The planning layouts are provided for you in the order specified for each plan task for the table specified. You can navigate from one layout to another for entry of your plan values into the table.
- If the default parameters function is activated in your task, you can display the default values on the entry screen for each layout and overwrite them if necessary.
- With default parameters, you also have 2 options for entry of your plan values:
  - <u>Free entry of records not planned:</u> This indicator specifies whether only values for which plan data already exists on the database is displayed for the characteristics. Here, new characteristic values can be created and inserted in the rows.
  - <u>Form-based entry:</u> If you set this indicator, all values for the characteristics with valid master data are displayed. In other words, no attention is paid to whether or not plan data exists. Instead, the same structure of characteristic values is displayed in each planning session.



- Several help functions are available for you to use during planning: These include changing distribution keys for each combination, scaling for units, setting of decimal places, display of possible combinations, branching to a valid combination of your choice, display of lead columns with or without totals, showing/hiding of header fields, branching to line item display, and so on.
- In addition, you can revaluate selected, ready for input data cells with a percentage rate or alternatively add values. You can also enter a negative sign. During "revaluation" the system subtracts the value calculated using the relevant percentage rate from the selected cells. You can also enter a negative sign when adding. During "adding" the system then subtracts the relevant value from the selected data cells.



■ You can branch within the period screen to display or enter individual periods.



- You can use new transaction data already present in the system as a template for a new planning. It can make sense, for example, to use the actual values of the current year as the basis for the planning in the following year.
- First, you enter the template plan. Next, specify to where you want to copy the data from the template plan.
- The data from the template can be copied in a non-summarized form.
- Alternatively, you can restrict the template data using a specified set. In this case, only those characteristics are copied that are contained in the set. Summarization occurs for all other characteristics.
- Example: You want to use the actual data of the previous year as template for the plan data of the following year. As actual data contains detail information such as the functional area that is not required for planning, you use a set to copy the data that includes the characteristics "Account" and "Business area" only. In this way, at the same time as actual data of the previous year is copied, a summarization of all functional areas occurs.
- You can revaluate selected template data with regard to currencies and quantities. You need to define revaluation factors to do this. If the revaluation factors are not sufficient for the currencies and quantities, you can use the user exit. In this way, you can define the revaluation process to suit your requirements.
- You can also define whether you wish to overwrite or cumulate existing target data.



**Unit: Planning** 

**Topic: FI-SL Planning** 



At the conclusion of this exercise, you will be able to:

• At the conclusion of this unit, you will be able to define plan presettings and plan parameters, enter plan data, and check the results.



Field managers are required to present revenue plans to the corporate group for each of their areas of responsibility.

Exercise: The sales revenues (accounts 802000, 8030000, and 804000) for Lines of Business CHEMXXX COMMXXX PHARMXXX and PTROXXX should be planned in just the 3rd currency USD for your company code ACXX (XX = your group number). The planned revenues in the months July to September should be 10% higher than in the other months. You have to create a distribution key for weighting of the summer months: GRXX (XX= your group number). You will use this distribution key for the relevant combination during creation of plan data.

When you create your plan data, you should determine the periods (from/to) on the initial screen.

You require plan line items for your plan totals. Number assignment is governed by document type P0.



Each combination of zone and revenue account is to be planned with an amount between 96,000 and 150,000 USD.

Menu path for presettings:

SAP Easy Access  $\rightarrow$  AC220:Reporting\_Analyst  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Plan Settings

Menu path for entry and display of planning data:

 $SAP\ Easy\ Access 
ightarrow AC220: Reporting\ Analyst 
ightarrow Special\ Purpose\ Ledger 
ightarrow Planning$ 

Procedure:

## 1-1 Presettings

1-1-1 Create version parameters for your company, ledger, version 1, and current year.

SAP Easy Access →AC220:Reporting\_Analyst → Special Purpose Ledger → Plan Settings → Maintain Local Version Parameters

1-1-2 Activate line items (document type: PL)

SAP Easy Access →AC220:Reporting\_Analyst → Special Purpose Ledger → Plan Settings → Activate Local Plan Line Items

Ledger: Your ledger

Version: 1

Company code: ACXX (XX = your group number)

Fiscal year: Current year

Save GXX-PLAN as a variant.

Description: "GXX planning"

1-1-3 Create the distribution key GRXX (XX= your group number) with the description *Revenue group XX:Summer months* + 10%.

SAP Easy Access  $\rightarrow$ AC220:Reporting\_Analyst  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Plan Settings  $\rightarrow$  Create Distribution Key

Save the distribution key.

1-1-4 Create the planning layout **GXX-REVENUE** (XX= your group number).

SAP Easy Access →AC220:Reporting\_Analyst → Special Purpose Ledger → Plan Settings → Create Planning Layout

Summary table: **ZZSLT** 

Planning layout: **GXX-REVENUE** 

Description: Revenue for LINES OF BUSINESS

For your lead column 1 you should determine the set **GXX-LINES OF BUSINESS** for the characteristic **RZZLOB**.

Choose the headings characteristic value and name. Confirm your entry.

For your lead column 2 you should determine the set **GXX-REVENUE** for the characteristic **Account**.

Choose the headings characteristic value and name. Confirm your entry.

Arrange your lead columns in order.  $Edit \rightarrow Columns \rightarrow Sort \ lead \ columns$ . Enter 1 for Special Region and 2 for account number.

For entry of the values for these characteristics combinations, you require a column with the key figure **KSL** (**group currency** (= ledger currency)), and as attribute column **unit** and **distribution key** (for key figure KSL).

Your general selection should contain data for the company code (ACXX), ledger AA (..RR), record type, plan, version, fiscal year, and for the periods (variables from/to values).

Confirm your entries.

Check and save your layout.

1-1-5 Create the planner profile **GXX-PLAN** (description: "Revenue Planning **Group XX**") (XX= your group number).

SAP Easy Access →AC220:Reporting\_Analyst → Special Purpose Ledger → Plan Settings –Maintain Planner Profiles

Choose *New Entries* and enter your planner profile with description. Confirm your entry.

Enter **ZZSLT** as table to be planned with default distribution key 1 for **currency**.

You require a planning task with your planning layout with this table.

Select the entry with the summary table and double-click *Plan tasks for table*.

Select *New entries* and enter the following:

Pos. 1 and your planning layout.

Select Parameters can be overwritten, document type PL

and currency 3.

Save your entries.

In the *default parameters* for your plan task, enter default values 1 and 12 for your **posting periods** and choose *Form-based entry*.

Save your entries.

Save your planner profile.

#### 1-2 Plan execution

1-2-1 Set your planner profile and choose the summary table ZZSLT

SAP Easy Access  $\rightarrow$ AC220:Reporting\_Analyst  $\rightarrow$  Special Ledger  $\rightarrow$  Planning  $\rightarrow$  Set Planner Profile

1-2-2 Enter your planning values. Do not forget to enter your distribution key GRXX for account 8030000 in conjunction with Lines of Business CHEMXXX COMMXXX PHARMXXX and PTROXXX.

SAP Easy Access →AC220:Reporting\_Analyst → Special Purpose Ledger → Planning → Enter Planning Data

#### 1-2-3 Display the planning documents and amounts.

 $SAP\ Easy\ Access 
ightharpoonup AC220:Reporting\_Analyst 
ightharpoonup Special\ Purpose\ Ledger 
ightharpoonup Plan-Summary\ Record\ Display\ SAP\ Easy\ Access 
ightharpoonup AC220:Reporting\_Analyst 
ightharpoonup Special\ Purpose\ Ledger 
ightharpoonup Planning 
ightharpoonup Display\ Plan\ Documents\ (The\ record\ type\ is\ 1.)$ 

## 1-3 Report Painter

The following report exists for the purposes of an additional check for the plan:

**GXX-PLN1** (*Lines of Business/actual revenue/plan/variance*)

The report has to be defined in your library **LXX** and assigned to a new report group.

Report group: **GXXP** 

Procedure: Define your report and assign it to a report group.

Execute the report and display the results.

# **Example result: GXX-PLN1**

Report name: GXX-PLN1

Company codes: ACXX

Page: XX/XX

COMMXXX

**CHEMXXX** 

802000

802000

8030000

804000

8030000

804000

**PHARMXXX** 

802000

8030000

804000

PTROXXX

LINES OF BUSINESS

Author: AC220-XX Selection date: xx/xx/20xx

General selection:

Your ledger AA(..RR)

Version: 001

Your ACXX company code

Current fiscal year

Current period

Check and save the report.

Assign the report to the report group GXXP, execute the report, and display the result.



**Unit: Planning** 

**Topic: FI-SL Planning** 

Exercise: The revenues (accounts 800200, 800300, and 800400) for Lines Of Business CHEMXXX COMMXXX PTROXXX and PHARMXXX should only be planned in the 3rd currency USD for your company code ACXX (XX = your group number). Planned revenues in the months July to September should be 10% higher than in the other months. You have to create a distribution key for weighting of the summer months: GRXX (XX= your group number). You will use this distribution key for the relevant combination when you create planning data.

During creation of planing data, you should determine the periods (from/to) on the initial screen.

You require plan line items for your plan totals. Number assignment is governed by document type P0.



Each combination of Line of Business and revenue account is to be planned with an amount between **96,000 and 150,000** USD.

Menu path for presettings:

SAP Easy Access  $\rightarrow$  AC220:Reporting\_Analyst  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Plan Settings

Menu path for entry and display of planning data:

 $SAP\ Easy\ Access 
ightarrow AC220: Reporting\_Analyst 
ightarrow Special\ Purpose\ Ledger 
ightarrow Planning$ 

#### Procedure:

#### 1-1 Presettings

1-1-1 Create version parameters for your company, ledger, version 1, and current year.

SAP Easy Access → AC220:Reporting\_Analyst → Special Purpose Ledger → Plan Settings → Maintain Local Version Parameters

New entries:

Ledger: Your ledger

Version: Version 1

Company code: ACXX (XX = your group number)

Fiscal year: Current year

Save the version parameter.

1-1-2 Activate line items (document type: PL)

 $SAP\ Easy\ Access 
ightarrow AC220: Reporting\_Analyst 
ightarrow Special\ Purpose \ Ledger 
ightarrow Plan\ Settings 
ightarrow Activate\ Local\ Plan\ Line\ Items$ 

Ledger: Your ledger

Version: 1

Company code: ACXX (XX = your group number)

Fiscal year: Current year

Save GXX-PLAN as a variant.

Description: "GXX Planning"

1-1-3 Create the following distribution key: GRXX (XX= Your group number)

SAP Easy Access →AC220:Reporting\_Analyst → Special Purpose Ledger → Plan Settings → Create Distribution Key

*Distribution key:* **GRXX** (XX = group number)

Choose Enter.

Description: Revenues group XX: Summer months + 10%

Period	Relative factor	Period	Relative factor	
1	10	2	10	
3	10	4	10	
5	10	6	10	
7	11	8	11	
9	11	10	10	
11	10	12	10	

Save the distribution key.

#### 1-1-4 Create the planning layout **GXX-REVENUE** (XX= your group number).

SAP Easy Access  $\rightarrow$ AC220:Reporting\_Analyst  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Plan Settings  $\rightarrow$  Create Planning Layout

Summary table: **ZZSLT** 

Planning layout: GXX-Revenue

Description: Revenue for LINES OF BUSINESS

For your lead column 1 you should determine the set **GXX-LINES OF BUSINESS** for the characteristic **RZZLOB**.

From the available characteristics, choose *Line of Business*, select the indicator for entry of sets, and enter the set **GXX-LINES OF BUSINESS**. Confirm your entry.

Choose the headings characteristic value and name. Confirm your entry.

For your lead column 2 you should determine the set **GXX REVENUE** for the characteristic **Account**.

Select the pushbutton "New lead column" and choose *Account number* from the list of available characteristics, select the indicator for entry of sets, and enter the set GXX **REVENUE**. Confirm your entry.

Choose the headings characteristic value and name. Confirm your entry.

Arrange your lead columns in order.  $Edit \rightarrow Columns \rightarrow Sort lead columns$ . Enter 1 for Line of Business and 2 for account number.

For entry of the values for these characteristics combinations, you require a column with the key figure **KSL** (**group currency** (= ledger currency)), and as attribute column **unit** and **distribution key** (for key figure KSL).

Double-click on column 1. Choose the key figure **KSL** (group currency) and confirm your entry.

Double-click the next free column. Choose the screen element **Attribute** and then *Unit*. Choose key figure **KSL** (group currency) and confirm your entry.

Double-click on the next free column. Choose the screen element **Attribute** and then *Distribution key*. Choose the key figure **KSL** (group currency) and confirm your entry.

Your general selection should contain data for the company code (ACXX), ledger AA (..RR), record type, plan, version, fiscal year, and for the periods (variables from/to values).

 $Edit \rightarrow General \ selections \rightarrow General \ selections$ 

From the available characteristics, choose posting period, company code, ledger, record type, version, and fiscal year.

For **posting period**, you select the indicator for entry of **variables** for the **from** and **to** field.

Enter company code ACXX.

Enter ledger AA (..RR).

Enter record type 1.

Enter version 1.

Enter the current fiscal year for fiscal year.

Confirm your entries.

Check and save your layout.

1-1-5 Create planner profile **GXX-PLAN** (description: "**Revenue planning group XX**") (XX= your group number).

 $SAP\ Easy\ Access 
ightarrow AC220: Reporting\_Analyst 
ightarrow Special\ Purpose$   $Ledger 
ightarrow Plan\ Settings\ -Maintain\ Planner\ Profiles$ 

Choose *New Entries* and enter your planner profile with description. Save your entries.

Enter **ZZSLT** as table to be planned with default distribution key **GRXX** for **currency**.

Select your profile and double-click on *Tables that can be planned*.

Choose *New Entries* and enter **ZZSLT** as summary table and distribution key currency **1**. Save your entry.

For this table, you require a plan task with your planning layout.

Select the entry with the summary table and double-click on *Planning tasks* for the table.

Choose *New entries* and enter the following:

Pos. 1 and your planning layout.

Choose the options *Parameters can be overwritten in planning*, document type *PL* 

and currency 3.

Save your entries.

In the *Default parameters* for your planning task, enter default values 1 and 12 for your **posting periods** and choose *Form-based entry*.

Select your plan task and double-click on *Default parameters*.

Choose New entries and enter the following:

Posting period 1

Posting period 12

Choose the option *Form-based*.

Save your entries.

Save your planner profile.

#### 1-2 Plan execution

1-2-1 Set your planner profile and choose the summary table ZZSLT

 $SAP\ Easy\ Access 
ightarrow AC220: Reporting\_Analyst 
ightarrow Special\ Ledger 
ightarrow Planning 
ightarrow Set\ Planner\ Profile$ 

1-2-2 Enter your planning values. Do not forget to enter your distribution key GRXX for account 800300 in conjunction with Lines Of Business CHEMXXX COMMXXX PTROXXX and PHARMXXX.

SAP Easy Access →AC220:Reporting\_Analyst → Special Purpose Ledger → Planning → Enter Planning Data

1-2-3 Display the planning documents and amounts.

 $SAP\ Easy\ Access\ o AC220: Reporting\_Analyst\ o Special\ Purpose$   $Ledger\ o Planning\ o Plan-Summary\ Record\ Display$ 

 $SAP\ Easy\ Access 
ightarrow AC220: Reporting\_Analyst 
ightarrow Special\ Purpose$   $Ledger 
ightarrow Planning 
ightarrow Display\ Plan\ Documents$ 

(The record type is 1.)

#### 1-3 Report Painter

The following report exists for the purposes of an additional check for the plan:

**GXX-PLN1** (*Lines Of Business/actual revenue/planned revenue/variance*)

The report has to be defined in your library **LXX** and assigned to a new report group.

Report group: GXXP

Procedure: Define your report and assign it to a report group.

Execute the report and display the results.

**Example result: GXX-PLN1** 

Page: XX/XX Report name: GXX-PLN1 Company codes: ACXX Fiscal year: xxxx Current period: xx Ledger: AA (..RR) Version: 1 Group plan currency Group actual currency Variance 800200 800300 8004000 **CHEMXXX** 800200 800300 8004000 **COMMXXX** 800200 800300 8004000 **PTROXXX** 800200 800300 8004000 **PHARMXXX** LINES OF BUSINESS \_\_\_\_\_\_

**Author: AC220-XX** Selection date:

xx/xx/20xx

General selection:

Your ledger AA (..RR)

Version: 001

Your ACXX company code

Current fiscal year

Current period

Row definition:

Characteristics:

- . Account number
- . Line of Business

Characteristic values:

Line of Business

Group: GXX-LINES OF BUSINESS

Account number:

Group: GXX-REVENUE

Choose Enter.

Position the cursor on row 1.

Choose the *Explode* icon:

Explode characteristics:

Explode Single values

1. Line of Business x

2. Account number x

Enter the text LINES OF BUSINESS for your row.

## **Column 1:**

X Predefined key figure

X Group currency plan

Characteristic values for basic key figure group currency:

Record type: 1

Version: 1

Texts:

Short: Group plan currency

Medium: Group plan currency

Long: Group plan currency

#### Column 2

X Predefined key figure

X Actual group currency

Characteristic values for basic group currency:

Record type: 0

Version: 1

Text:

Short: Group actual currency
Middle: Group actual currency
Long: Group actual currency

# Column 3

X Formula

X001-X002

Texts:

Short: Variance
Medium: Variance
Long: Variance

## $\rightarrow$ Edit $\rightarrow$ General selections:

Characteristic values:

Ledger: Your ledger AA (..RR)

Fiscal year: Current year

Company code: Your company code ACXX

Period: Current period

Select Enter.

Check and save the report.

Assign the report to report group GXXP, execute the report and display the result.

# **Allocations**



# **Contents:**

- Distribution and Assessment
- Sender and Receiver
- Determining the Allocation Type, the Sender Values and Defining the Receiver Tracing Factors
- Organizing the Allocation in Cycles and Breaking Down the Cycles into Segments

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# **Allocations: Objectives**





At the completion of this unit, you will

- be familiar with the term Allocation, the umbrella term for distribution and assessment
- know how to use the different types of allocation
- know how to define sender and receiver values
- be able to create and execute an FI-SL cycle

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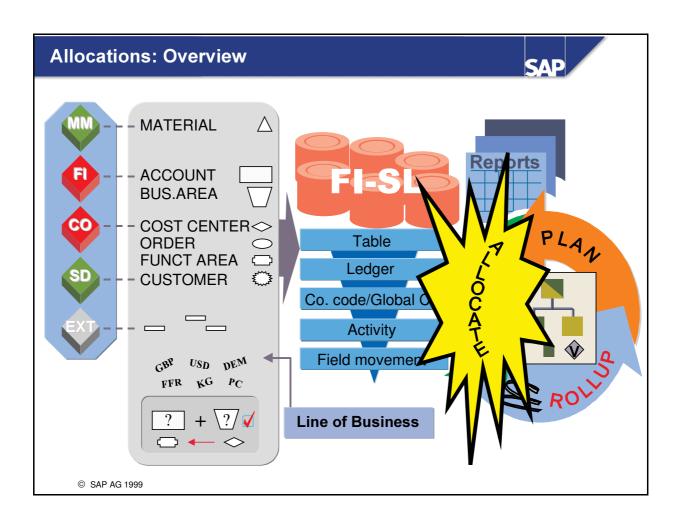
# **Allocations: Business Scenario**

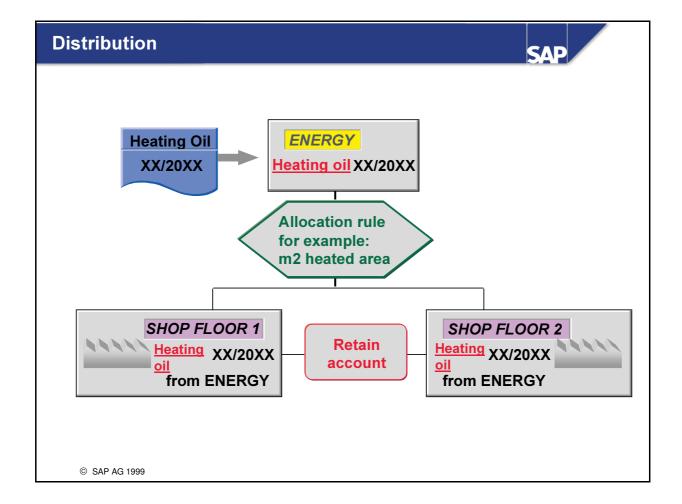




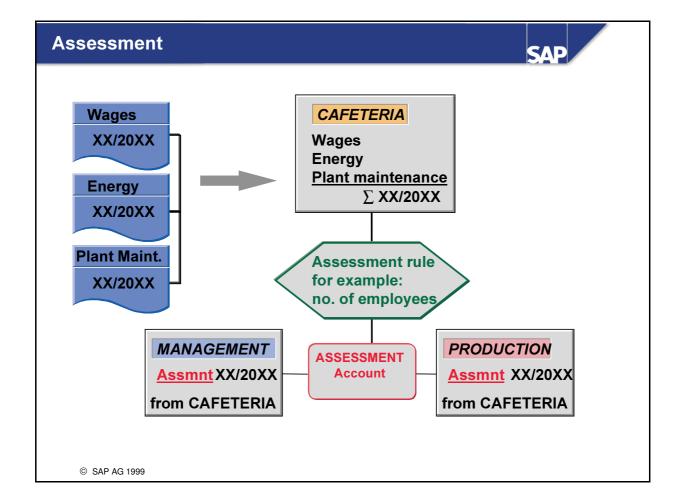
- To allow for a precise control and analysis of the costs posted to and collected in the functional areas, these costs have to be allocated to the Line of Business to reflect the return on investment for the products which are sold in these areas
- Various methods for allocating these costs, percentage split and receiver based criteria (e.g. headcount of persons employed, revenue) - have to be tested and implemented
- For this purpose, it must be analyzed whether the allocation instruments of FI-SL are acceptable to meet these goals

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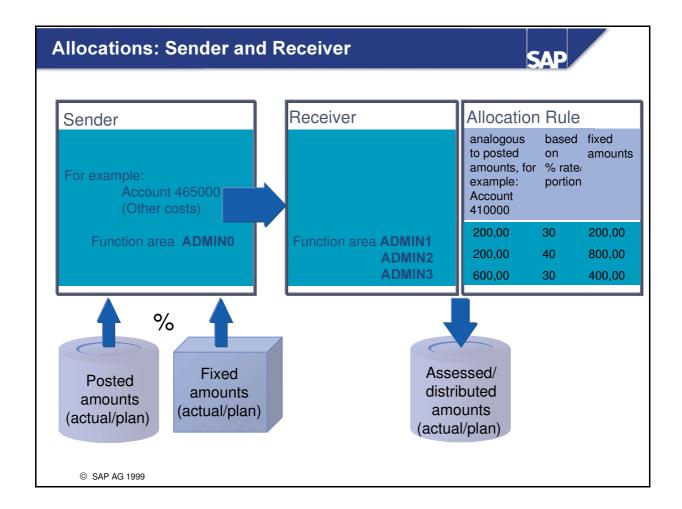




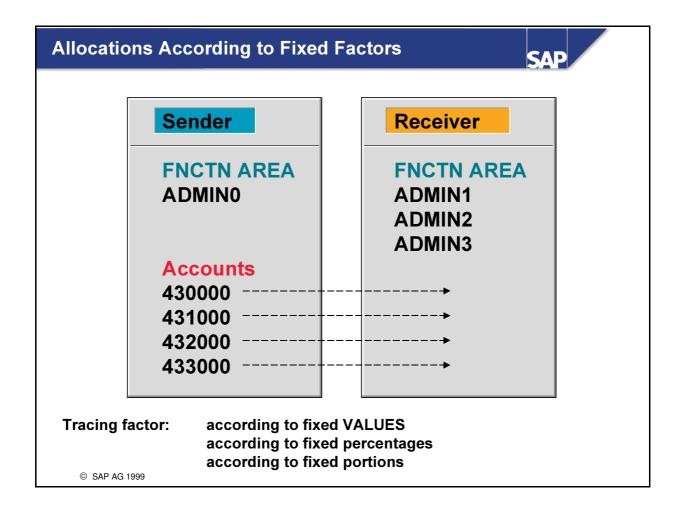
- The data stored under an account in FI-SL can be distributed using a user-defined key. Postings made to accounts (for example, electricity costs) are collected for a cost center, for example, and allocated at the end of the period using the defined key.
- In distribution, the original account is credited with the allocation.
- Line items that document the distribution are written to the sender as well as the receiver.
- The distribution can be repeated as often as you want.



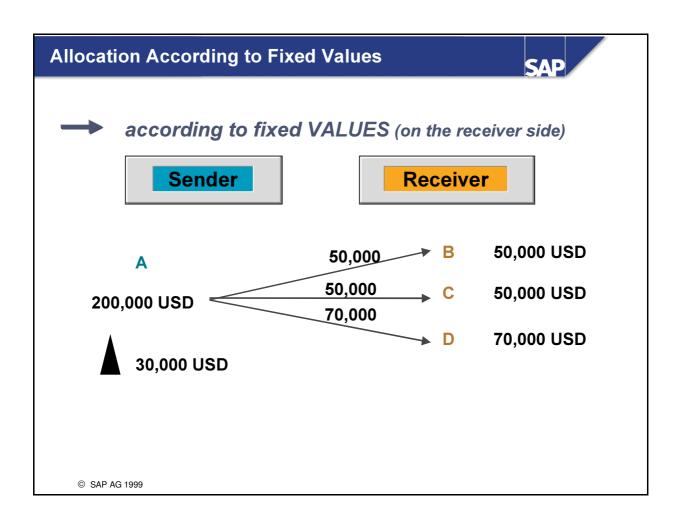
- During assessment, the account balances are collected on a cost center, for example, and allocated as a total via an assessment account to other characteristics (for example, cost centers).
- The assessment is performed according to user-defined rules.
- Line items that document the assessment are written to the sender and the receiver.
- The assessment can be repeated as often as you want.

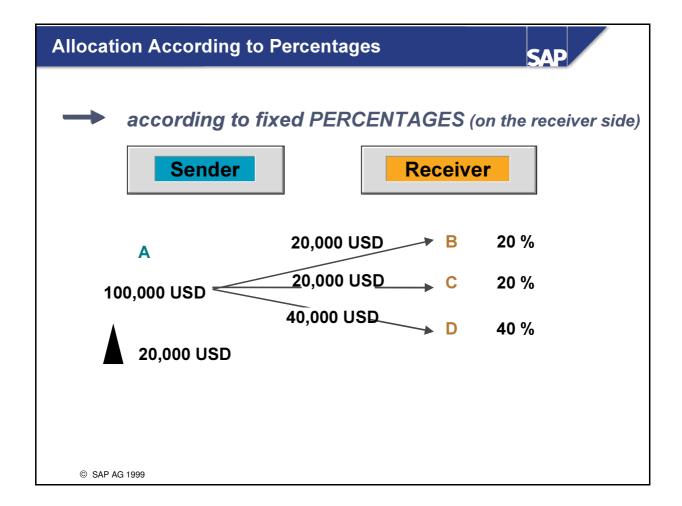


- You must define sender and receiver rules to allocate costs.
- For the sender, you specify whether posted amounts (actual or plan values) or fixed amounts (actual or plan values) are to be allocated, or whether a residual percentage value should remain on the sender.
- In the receiver rules, you specify whether the allocation is to be performed according to fixed values (amounts, percentage rates, portions) or whether the tracing factors are to be determined from posted values (or quantities) such as accounts, activity types, statistical key figures during the allocation.

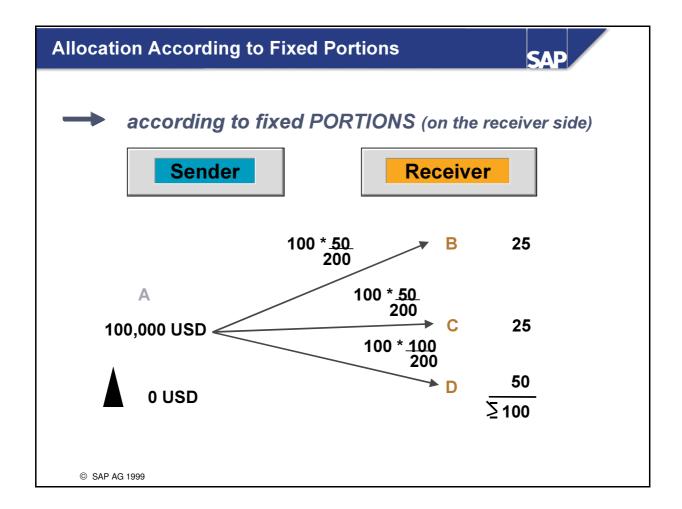


- You must specify the sender combinations of characteristics and define the receivers to which the data should be allocated.
- The sender characteristics are taken over (inherited) by the receiver, as long as the characteristics have not been entered in the receiver.

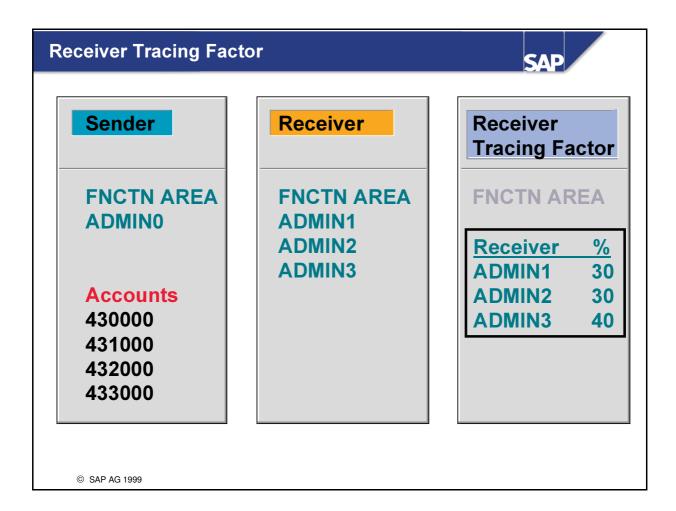




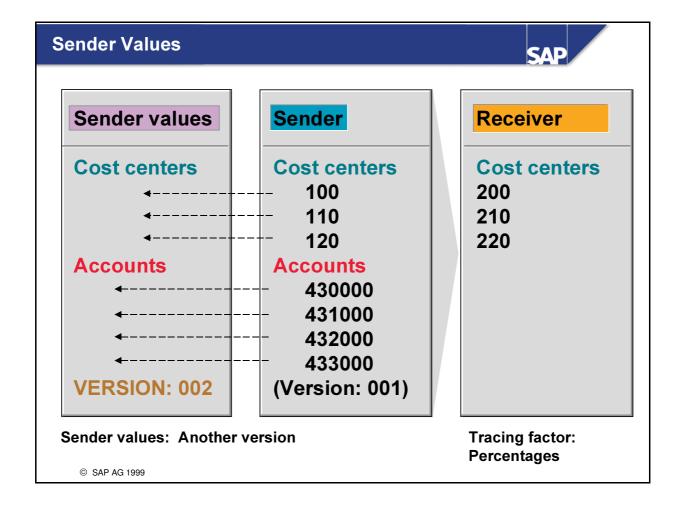
- The total of the percentages may not exceed 100%.
- If the total percentage is less than 100%, the residual value remains on the sender.



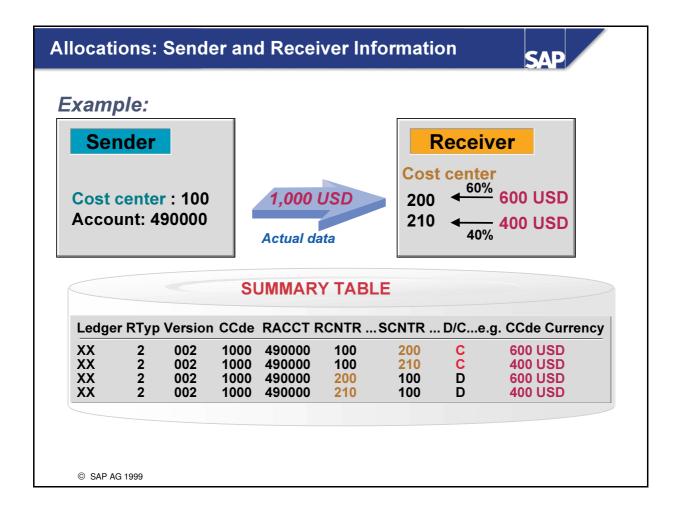
■ With this procedure, the senders are usually credited completely (the exception is the residual percentage value on the sender).



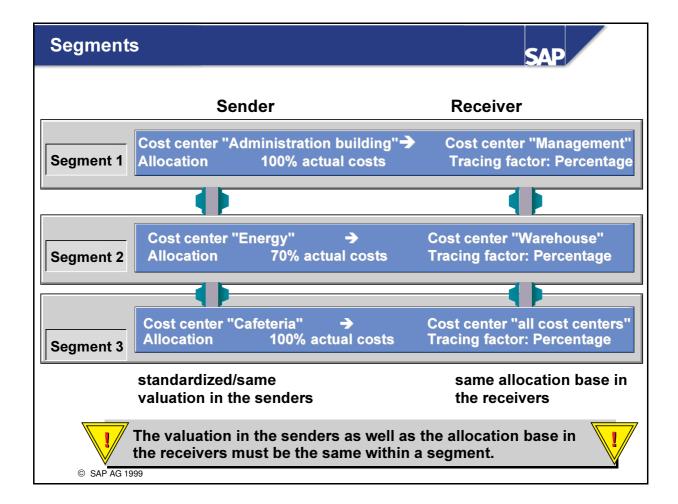
- You can specify tracing factors to determine the receiver records to be debited. The records are read from the database to calculate the distribution percentages.
- In the above example, the personnel costs of the functional area ADMIN0 are distributed to the other administrative areas.
- The relative number of employees in the respective functional areas is used to determine the receiver tracing factors.
- All characteristics that are not entered are inherited by the receiver.



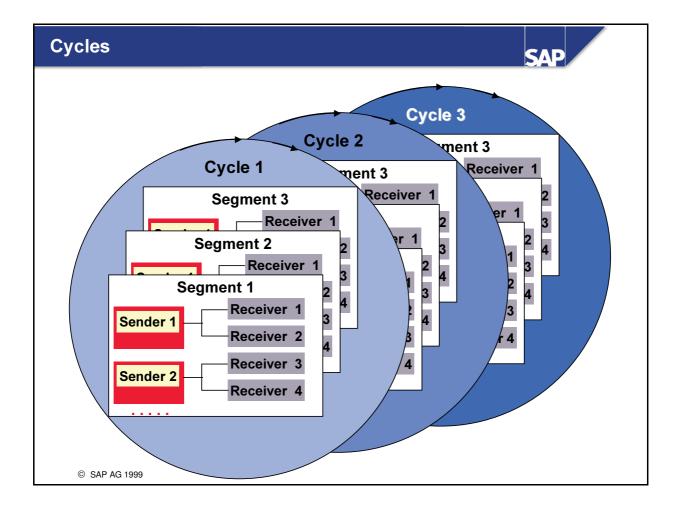
- Sender values as the allocation basis for determining the sender values.
- Sender values can be specified to determine the records to be read for the senders. All of the characteristics that are not entered are inherited from the sender.
- Example: The personnel costs that have accrued in version 002 in cost centers 100, 110, and 120 determine the sender value; that is, the amount with which the sender is credited. However, the senders are credited with this amount in version 001 only and the receiver cost centers are debited accordingly.



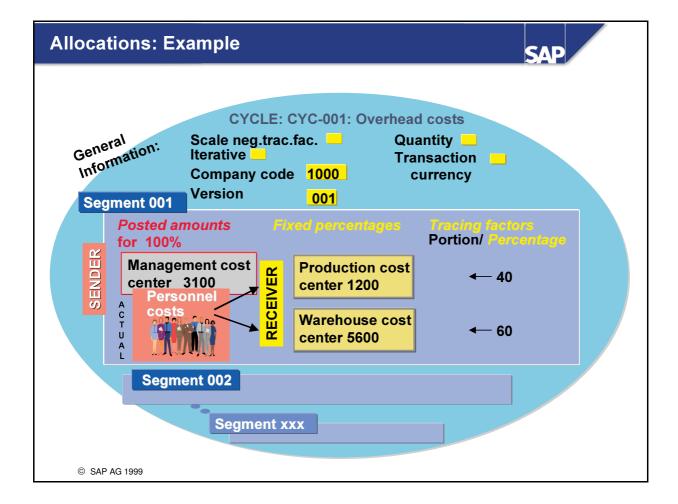
- During assessment and distribution, records are updated in the summary table with record type 2 (allocated actual data) or record type 3 (allocated plan data).
- You can specify whether the records should contain the sender and receiver information (RCNTR to SCNTR, RFAREA to SFAREA, etc.).
- This information is documented as line items for the summary records.
- If you repeat an assessment and distribution within a period, the summary records are reversed before the new execution.
- Thus the allocation can be repeated at any time.



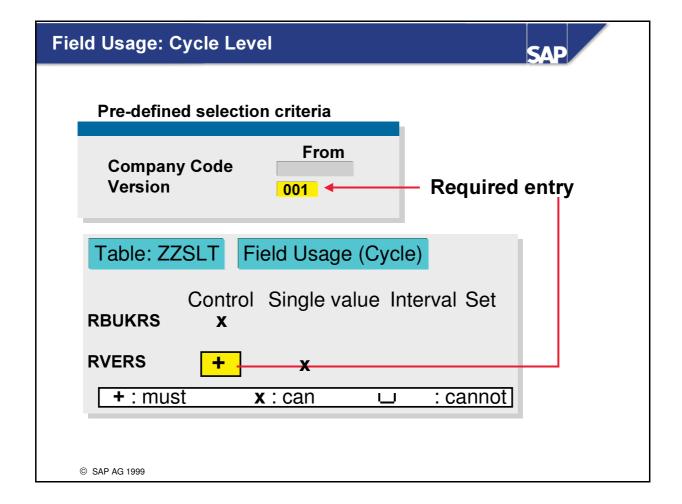
■ A segment combines sender cost centers, for which the values being allocated are to be calculated in the same way, and receiver cost centers, for which the tracing factors are to be calculated in the same way.



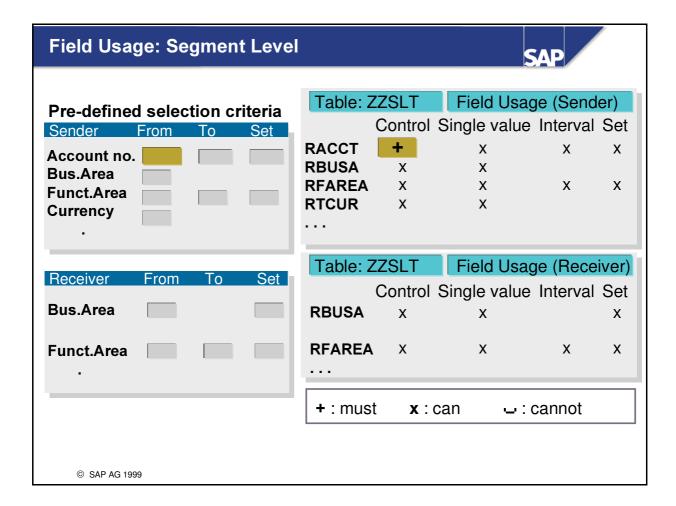
- Sender and receiver groups are combined in cycles.
- Cycles are stored chronologically. During processing, you can select cycles using the validity period.
- Divisions in the company can be allocated by splitting them into cycles (also separated by time). You can also set up allocation cycles that are based on one another. This enables you to process the service cost centers in the first cycle and the final cost centers in the subsequent cycle, for example.
- Cycles are processed in succession.



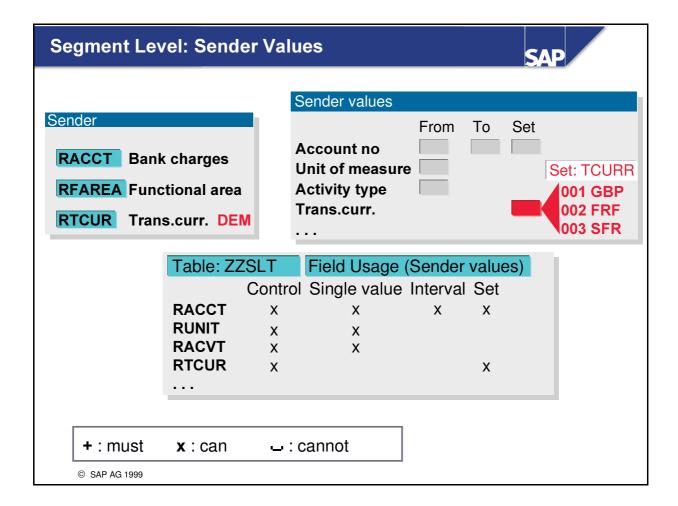
- You enter the predefined selection criteria for the entire cycle in the cycle header.
- In addition to the required entries such as company code and version, you can decide whether any negative tracing factors results should be scaled the segments of an allocation cycle are processed iteratively (Here the result of each segment is used in the next segment of the cycle.) the posted quantities are also allocated the originally posted transaction currencies are are also allocated.
- The individual segments determine how the sender values and tracing factors for the receiver are calculated.



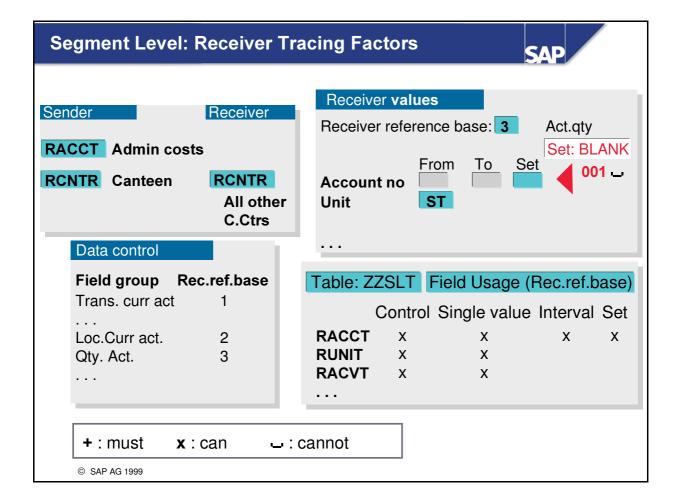
- Fields to be used in Allocations must be declared at different levels:
- At Cycle level, if a field is used it can be entered with a single value, an interval and/or a set.



- Fields to be used in Allocations must be declared at different levels:
- At Segment level, if a field is used it can be entered as a receiver or sender with a single value, an interval and/or a set.



- Fields to be used in Allocations must be declared at different levels:
- At Segment level, if a field is used as a sender value field, it can be entered with a single value, an interval and/or a set.



- Fields to be used in Allocations must be declared at different levels:
- At Segment level, if a field is used as a receiver tracing factor field, it can be entered with a single value, an interval and/or a set.
- In addition the receiver reference base, e.g. actual quantity, plan quantity can be selected.

# **Allocations: Summary**





- The difference between an assessment and a distribution has been explained.
- You have also learned which sender and which receiver you allocate and how you can determine your allocation base.
- You have been shown, as demonstrated by an example, how to add allocation segments into a cycle.



**Unit: Allocations** 

**Topic: Allocation of expenses to Lines of Business** 



At the conclusion of this exercise, you will be able to:

• Define and execute an Allocation



To allow for a precise control and analysis of the costs posted to and collected in the general functional areas, these costs have to be allocated to the Lines of Business to reflect the return on investment for the products that are sold there.

#### 1-1 Allocations

#### Menu Path:

 $SAP\ Easy\ Access o Activity\ Group\ SL: Reporting\_Analyst o Special\ Purpose\ Ledger\ o Periodic\ Processing\ o Allocation$ 

The actual General Expense totals for the actual period that have been posted in version 1 for your company code ACXX to the accounts 472000 and 476000 in the functional areas sales (0300), administration (0400) and R&D (0500) are to be distributed to the Line of Business PTROXX1, CHEMXX1, COMMXX1 and PHRMXX1. The tracing factor for these receiver lines of business are 10%, 20%, 30% and 40% respectively.

### Procedure:

1-1-1 Create the Allocation Cycle GXX-DIST

(Validity dates 01.01.Curyear - 31.12. Curyear)

Header information: Company Code ACXX and Version 1

- 1-1-2 Add one Segment (S1) to your Cycle with the appropriate Sender and Receiver information, Sender and Receiver rules and tracing factor (%) for the receivers.
- 1-1-3 Execute the Cycle for the current period, first in test mode and then for real. Document type is A0.

1-1-4 View the summary records and the document posted (same menu path as for displaying actual totals).



## Record Type for actual allocated data is 2!

1-2 **OPTIONAL** *Painter report:* GXX-ALLOC, Library LXX

('Line of Business: Actual/Allocated costs'):

Report group: **GXXA** (XX = your group number)

Sample result:

**Local Actual** Local Distributed Actual

Lines Alloc. Costs

PTROXX1

CHEMXX1

COMMXX1

PHRMXX1

Lines of Business

General Selection:

Your Ledger

Your Company Code

Version 1

Current Year

**Current Period** 

Debit/Credit (indicator) S

## **Solutions**



**Unit: Allocations** 

**Topic: Allocation of expenses to Line of Business** 

1-1 Allocations

Menu Path:

 $SAP\ Easy\ Access o Activity\ Group\ SL: Reporting\_Analyst o Special\ Purpose\ Ledger\ o Periodic\ Processing\ o Allocation$ 

The actual General Expense totals for the actual period that have been posted in version 1 for your company code ACXX to the accounts 472000 and 476000 in the functional areas sales (0300), administration (0400) and R&D (0500) are to be distributed to the Line of Business PTROXX1, CHEMXX1, COMMXX1 and PHRMXX1. The tracing factor for these receiver lines of business are 10%,20%, 30% and 40% respectively.

### Procedure:

1-1-1 Create the Allocation Cycle GXX-DIST (Validity dates 01.01.Curyear - 31.12.Curyear)

Allocation  $\rightarrow$  Actual distribution  $\rightarrow$  Create

Ledger: Your Ledger

*Cycle:* **GXX-DIST** (XX = your company code)

Starting date: **01.01.Curyear** 

Enter

**Text:** General Expense Allocation

*Indicators*: None set

Preset selection criteria:

Company code: ACXX (XX = your Co. Code)

Version: 1

1-1-2 Add one Segment (S1) to your Cycle with the appropriate Sender and Receiver information, Sender and Receiver rules and tracing factor (%) for the receivers.

Press Button 'Attach Segment'

Segment name: S1 'Distr. Gen. Expenses to Line of Business'

Sender values Tracing factor

*Rule:* 1 *Rule:* 3

Leave rest as set Leave rest as set

Allocation characteristics:

Sender:

Account number: Set: GXX-GEN-EXPENSE

Functional area: Set: GXX-FAREAS

Receiver:

Line of Business: Set: **GXX-ZZLOB** 

Press Button 'Tracing factors'

Receiver percent
PTROXX1 10
CHEMXX1 20
COMMXX1 30
PHRMXX1 40

Save cycle

1-1-3 Execute the Cycle for the current period, first in test mode and then for real.

Allocation  $\rightarrow$  Actual distribution  $\rightarrow$  Execute

Ledger: Your Ledger

Parameters:

Period: Current Period

Fiscal Year: Current Year

Document type: **A0** 

Process with: x Detailed lists

First with Test Run selected and then remove Test Run X

In your protocol, view your Senders and Receivers and in the actual run, note the Allocation document number.

1-1-4 View the summary records and the document posted (same menu path as for displaying actual totals)



### Record Type for actual allocated data is 2!

1-2 <u>OPTIONAL</u> Painter report: GXX-ALLOC, Library LXX ('Liness: Act/Alloctn'): Report group: GXXA

Sample result:

### Local Actual Local Distr. Actual

Lines alloc.costs

PTROXX1

CHEMXX1

COMMXX1

PHRMXX1

Line of Business

General Selection:

Your Ledger

Your Company Code

Version: 1

Current Year

**Current Period** 

Debit/Credit(indicator): **S** 

In 'Lead column' Insert 'Line alloc. costs'

Double click on Row 1:

Choose Characteristics:

Line of Business

Line of Business

*Group:* **GXX-ZZLOB** 

Enter texts:

Short: LOB

Medium: Line

Long: Line Of Business

Continue

Position cursor on Row 1 and double click on ICON 'Explode'

**Sort Characteristics:** 

**Explode** 

 $\mathbf{X}$ 

Continue.

Double click on Column 1

Select Element type:

Predefined Key Figure

Local. curr. act..

Key figures

Local currency

Choose characteristics:

Record type

Record type 0

Short text: Lcurr. act.

Medium text: Local curr act.

Long Text: Local curr act.

Continue

Double click on Column 2

Select Element type:

Predefined Key FIgure

Local curr. act. assmnt

Key figures

Local currency

Choose characteristics:

Record type

Record type 2

Short text: Lcurr Dist.

Medium text: Local Distr. Actual

**Long Text:** Local Distributed Actual

Continue

 $\rightarrow Edit$ 

Gen. .data selection:

Change

Pick Characteristics:

Ledger

Version

Fiscal year

Company code

Period

Debit/Credit

Continue

Enter Characteristic Values:

Ledger: your Ledger

Version: 1

Fiscal year: Current year

Company code: your Company .Code ACXX

Period: Current Period

Debit/Credit: S

Continue.

Save your report

Maintain texts and save

Check your report.

 $\rightarrow$  Report  $\rightarrow$  Check

Save your report.

Assign your report to a report group:

 $\rightarrow$  Environment  $\rightarrow$  Assign report group

*Report group:* **GXXA** (XX = your group no.)

Continue. Confirm creation

Execute.

 $\rightarrow$  Report  $\rightarrow$  Execute

Regions: Act/Alloctn; Selection

Execute and view the results

## **Rollups**



### **Contents:**

- Example of a Rollup
- Different Types of Summarization
- Defining a Rollup
- Defining a Sequence with Additional Restrictions and Selection Criteria
- Field Movements and Substitution Activities
- User Exits
- Executing a Rollup and Checking the Results

# **Rollups: Objectives**





At the completion of this unit you will

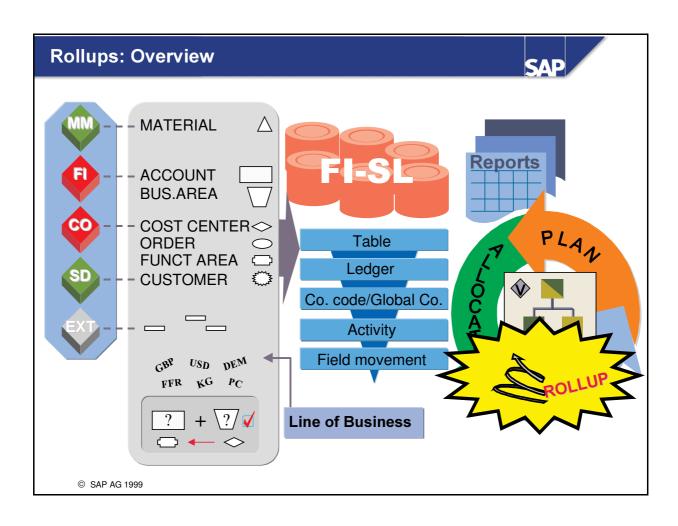
- be familiar with the the various types of summarization
- know how to maintain the parameters for rollup execution
- be able to execute a rollup and check the results of the data update

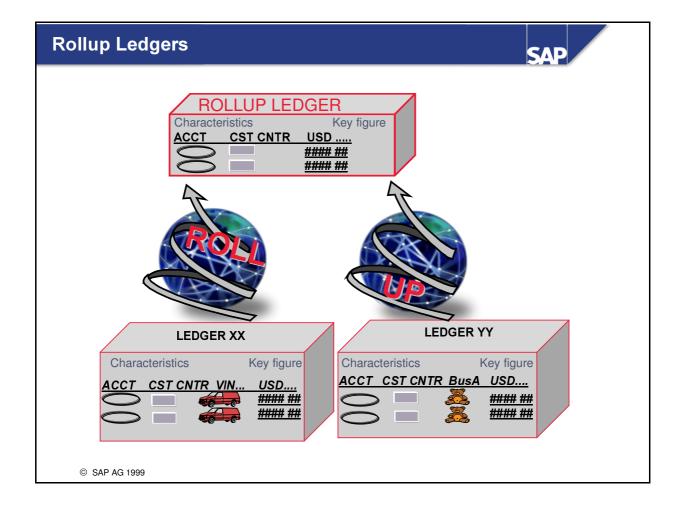
## **Rollups: Business Scenario**



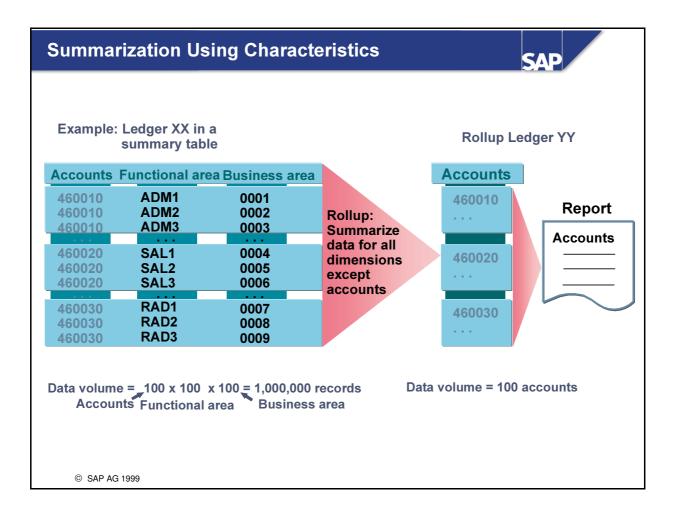


- Populating the two ledgers (the 0F-Ledger for the P&L by functional areas and the second with the extension on the Line of Business and material number) from through and adjustment postings, will probably cater for most of special purpose reporting requirements.
- For some reports, however, it may well be useful for the Business Line managers to aggregate the data at higher levels to accounting groups and Business Line zones as well as upgrading balances for simulation and statistical reasons.
- In particular, the capability of the FI-SL Rollup functionality to further condense and substitute data across characteristics will be analyzed.

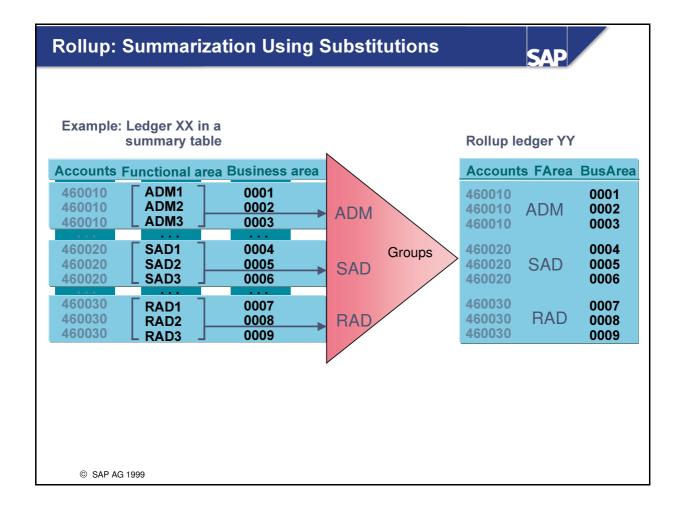




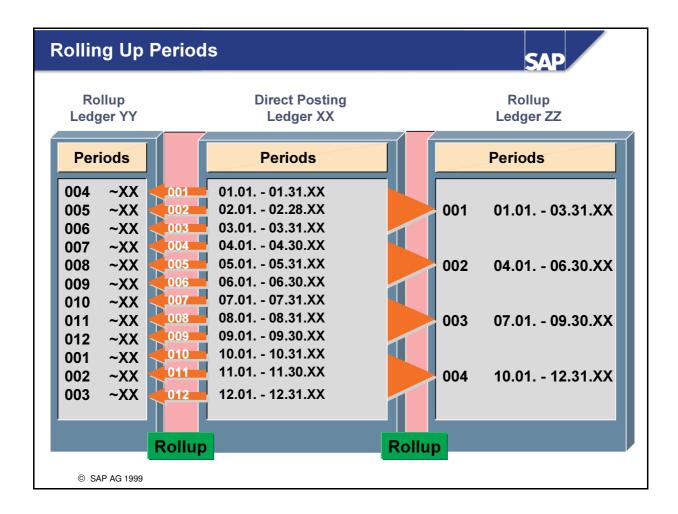
- The number of records in the summary table can be relatively large due to the additional account assignments.
- For certain evaluations, the totals are not required to have the same level of detail as in the source ledger.



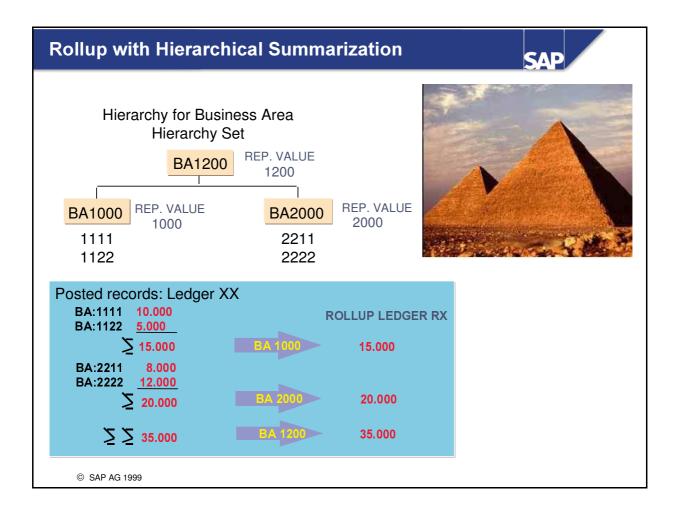
■ By omitting certain characteristics, you can summarize the data in the rollup ledger to a specific level of detail.



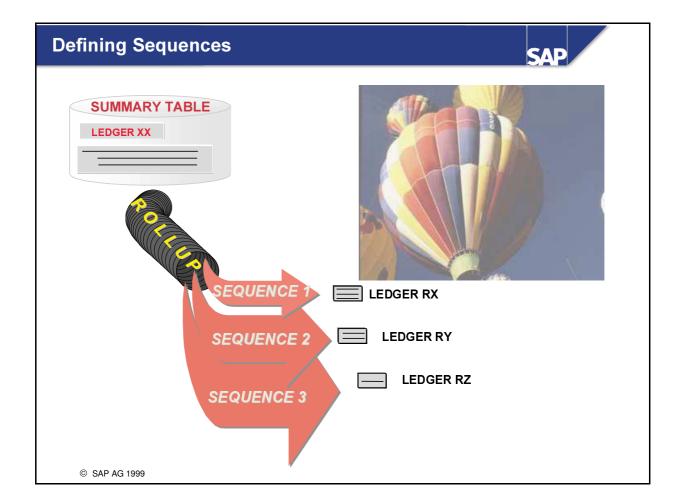
- You can also summarize the data in the rollup ledger by substituting one or more characteristics, for example:
  - product a product group
  - · account a account group
  - functional area a functional area group
- To use substitutions, you specify a condition for the substitution in the rollup definition. When this condition is met, the substitution is carried out.



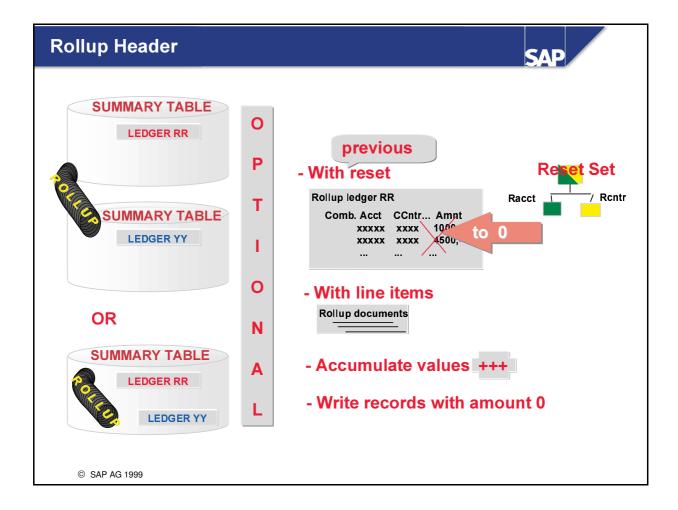
- You can roll up several periods at the same time.
- You can also perform a summarization over several periods. For example, a quarterly report can be created from 12 periods (ledger ZZ).
- You can also roll up data to a ledger that uses a non-calendar fiscal year (ledger YY). The fiscal year of the source ledger corresponds to the fiscal year.



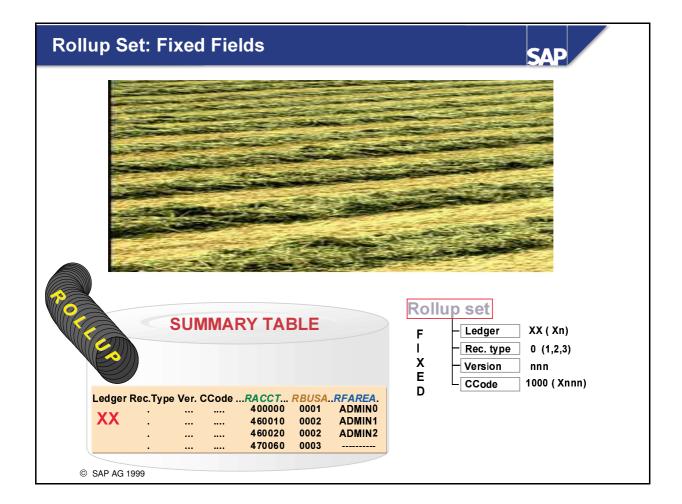
- Rollup with hierarchical summarization allows you to summarize the data from the source ledger bottom-up according to the hierarchical structure you have defined (for example, a cost center or profit center hierarchy).
- When the rollup is executed, the summarized values are stored under the name of the representative value of the respective set.



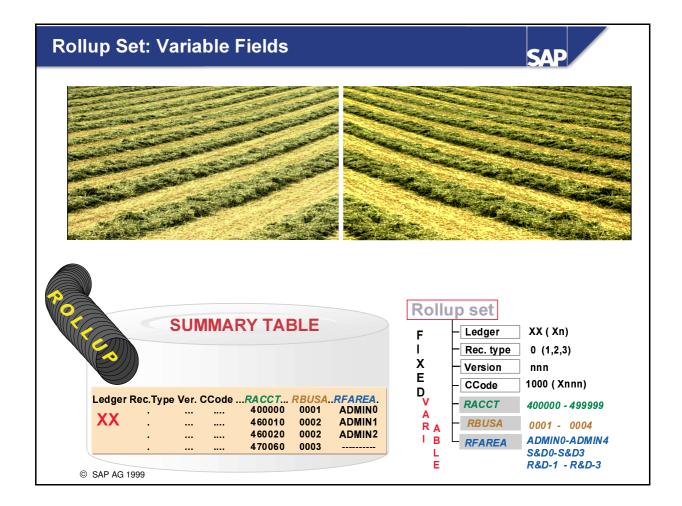
- In the rollup definition, you enter information that is valid for all sequences (that is, general conditions that apply to the entire rollup run, for example, the maximum quantity of data to be selected for the rollup).
- A rollup with single-level (not hierarchical) summarization can contain several sequences.
- Dividing a rollup into sequences is recommended if you want to
  - store only certain data records from a maximum selected quantity of data in one or more rollup ledger(s), and/or
  - transfer the same source data using a different method.



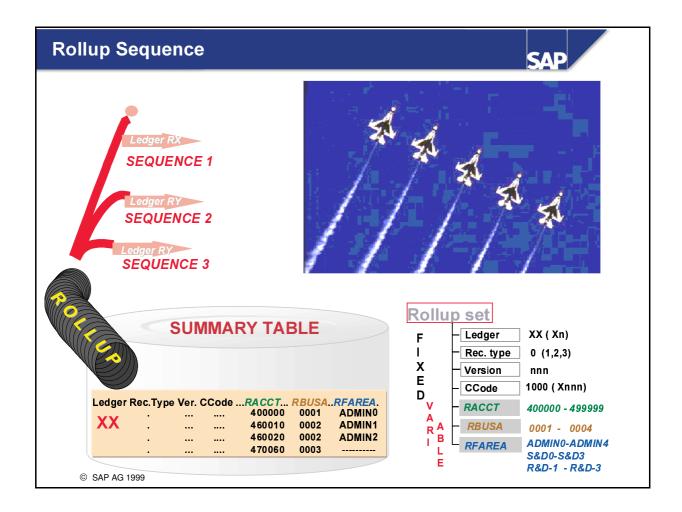
- The following information is stored in the rollup header:
- The summary tables from which and into which the data records are to be rolled.
- Whether you want to use the reset set to reset data in the rollup ledger(s) to zero before the rollup is executed.
- Whether line items are to be written for each rollup record. (These line items document how the rollup summary record was produced and allow you to reverse the rollup later.)
- Whether values are accumulated in the rollup ledger.
- Whether records that have a balance of zero in all periods are to be updated in the rollup ledger.



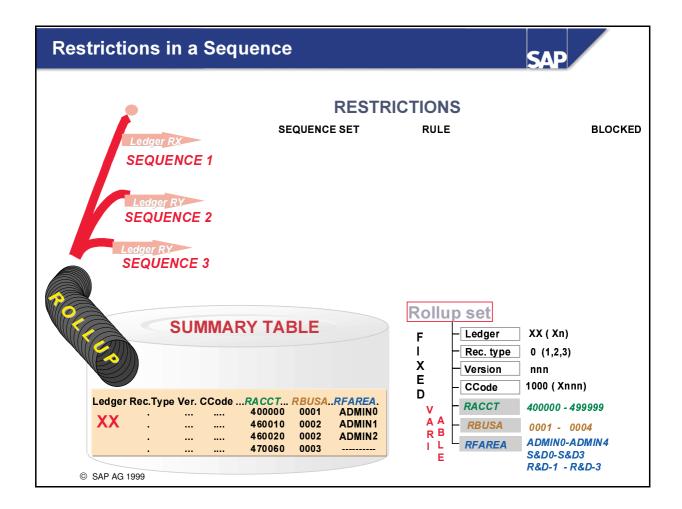
- The rollup header set determines the maximum amount of data to be selected from the source ledger(s) for the rollup. You can limit this amount of data using individual rollup sequence sets, but you cannot however increase this amount of data.
- The rollup up header set mst at least contain the dimensions 'ledger', 'record type', 'version' and 'company code'/ 'global company'.
- For a rollup with hierarchical summarization, you must also create a single-dimension set to define the hierarchy that is to be summarized. You must include this single-dimension set in your rollup header set. If you enter the dimension of the single-dimension set in the field 'Hierarchy dimension', the system recognizes that this set is to be used in the rollup header set to determine the hierarchy structure.



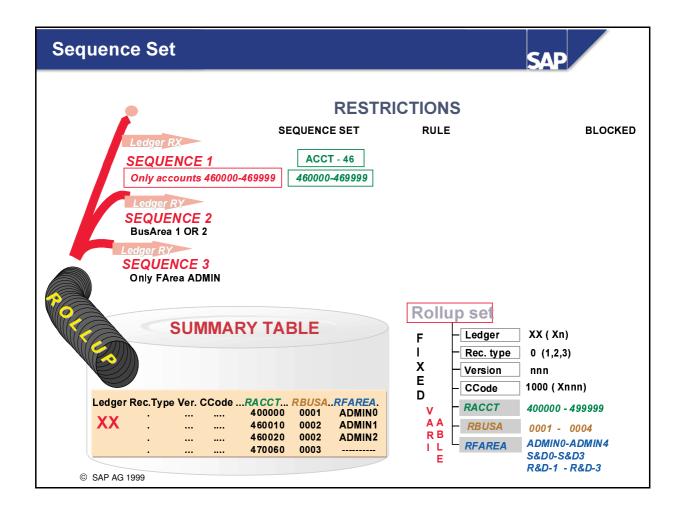
- In addition to the fixed characteristics (ledger, record type, version, company code [or global company]), the rollup set contains the variable characteristics or combinations of characteristics that determine which database records are to be read for the rollup.
- The rollup set determines the maximum quantity of data that can be selected for the rollup.



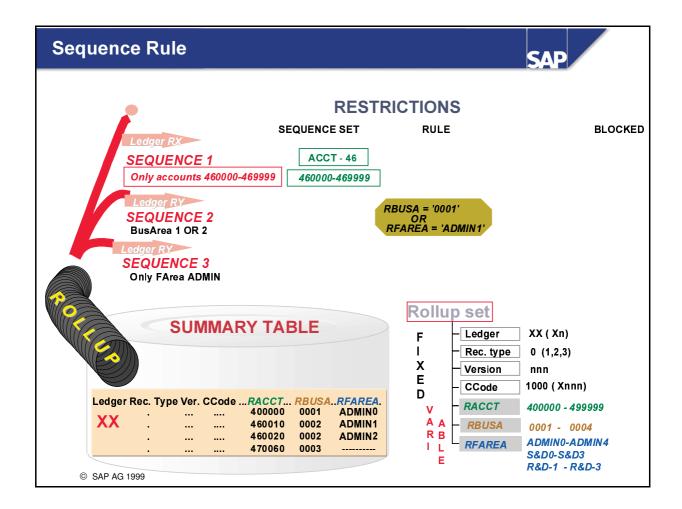
■ Dividing a rollup into sequences with target ledgers.



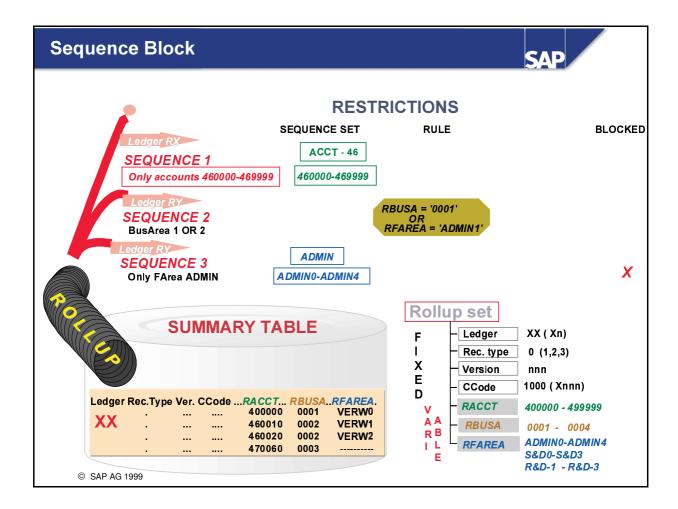
■ You can limit the data selected for the rollup at sequence level by using a sequence set or a rule.



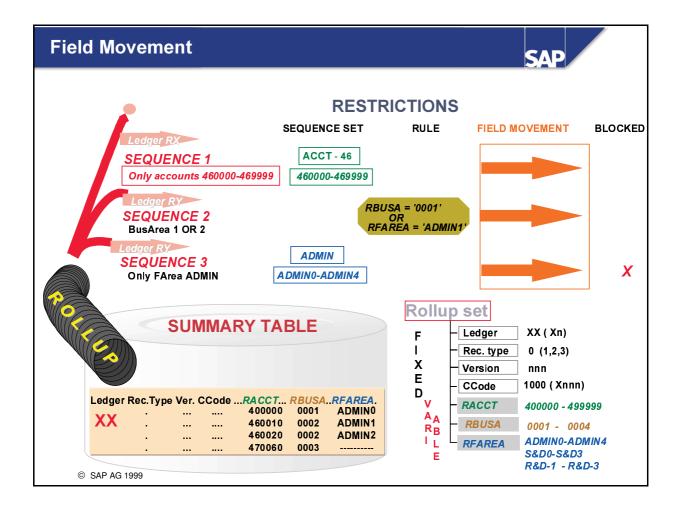
■ Sequence set - With a sequence set, you can specify which data should be rolled up for the specific sequence. If you enter a sequence set the relevant sequence can only read those database records that satisfy both the rollup header set and the sequence set when you execute the rollup.



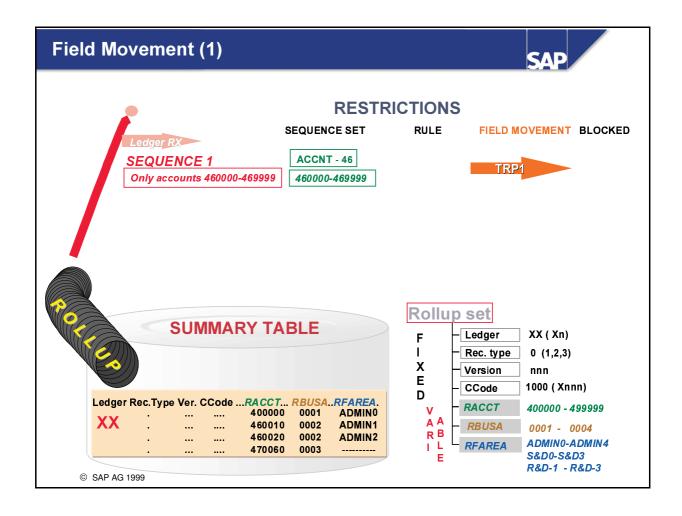
■ Rule: - You can use a rule (selection condition) to further limit the total set of data being selected if it can not be limited using the rollup set (or the sequence set); for example, you can define OR conditions between the characteristics.

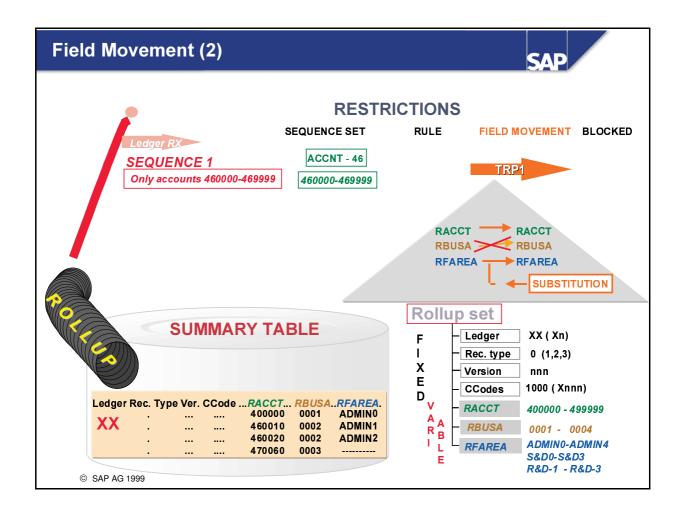


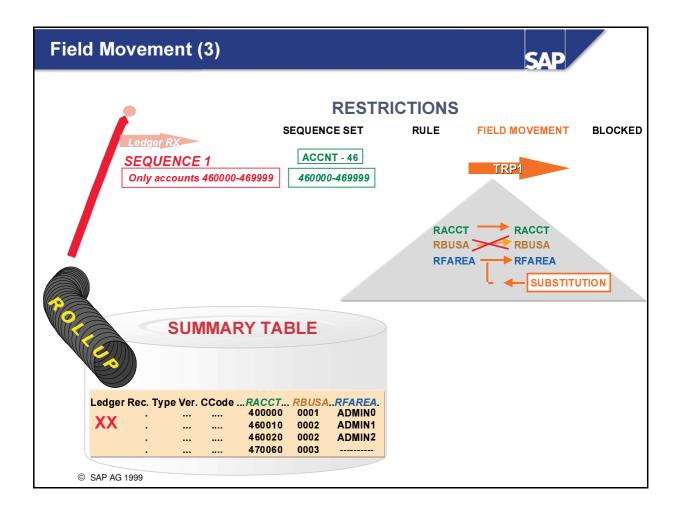
■ **Blocking** indicator: - If the *Blocked* indicator is set for the sequence, the sequence is not taken into account when the rollup is executed.

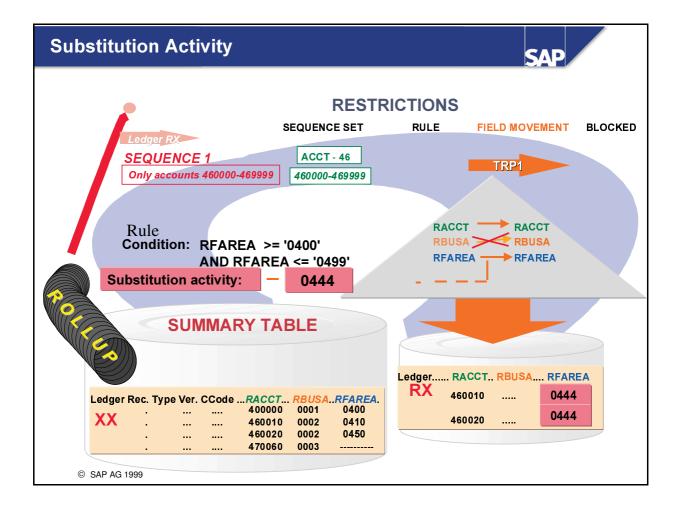


■ **Field movement:** - With a field movement, you can specify the variable characteristics that are transferred with the fixed characteristics during the rollup.

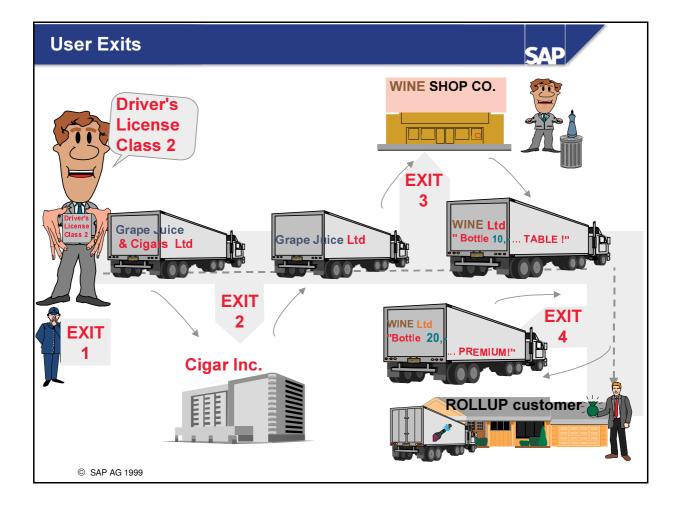




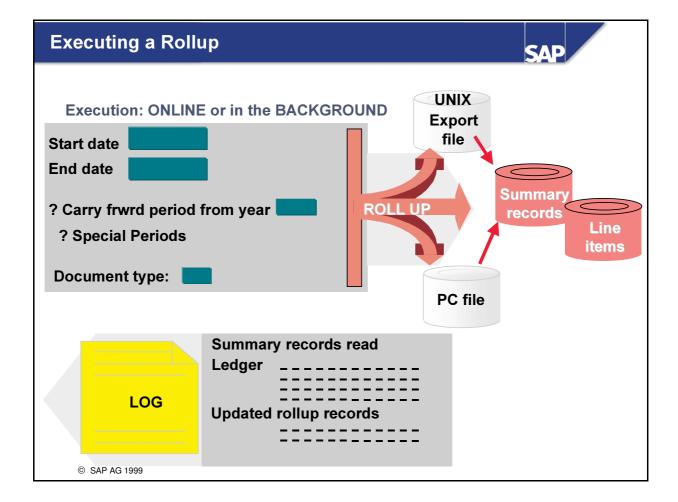




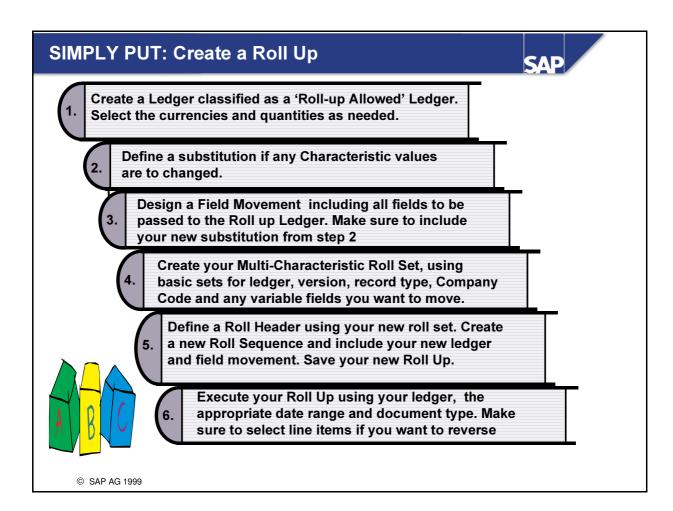
- Using **field movements**, you can specify which variable characteristics are to be transferred. For each field movement, you must enter a value for the sender and receiver fields.
- If the characteristics are not transferred to the receiver table, the data for these fields is summarized.
- A substitution activity can be assigned to each receiver field.
- Using a substitution activity, you can replace the content of the characteristics (for example, RFAREA) with any constant value.



- When a rollup is executed, user exits can be used at four different points:
  - Exit in the rollup header This exit is called up before the data records are processed. At this exit point, you can process general validations, for example, to check the period interval for the rollup.
  - Exit 1 in the field movement header table This exit checks the validity of sender records using user-defined criteria (for example, ATAB tables).
  - Exit in the substitution activities in the field movement This exit allows you to make substitutions for certain characteristics (for example, cost center à cost center group, account à account group).
  - Exit 2 in the field movement header table This exit is called up as soon as the receiver record is completely created. At this exit point, substitutions can also be made in the amount fields (for example, revaluation or devaluation of certain account group balances).
- You define user exits using the format Uxx (where xx = a two-digit exit number). The form pool names for user exits are listed in the T80D table. In the RGLVS000 program, you will find examples of standard exits for the four exit points given above. This program can be copied and configured in your respective clients.



- When you execute a rollup, you specify the periods that are to be rolled up by entering a From period and a To period (with the fiscal year).
- You can also specify whether a carry-forward period is to be rolled up for a specific year.
- The document type is required if line items are to be written for this rollup. The document type allows you to reverse the rollup records at a later time.
- The data is usually rolled up to the FI-SL tables directly. Moreover, the data can be written to or read from an export file (sequential file or PC file).
- You can request a comprehensive list with all the records that were read and generated during rollup execution.



# **Rollups: Summary**





- In this unit you have been shown the different types of summarization that you can perform using rollups
- You have learned that rollup sequences allow you to make further distinctions with regard to data quantity and field movements
- You have also learned how to execute and check a rollup



### **Unit: Rollups**

### Topic: Definition and Execution of a Rollup



At the conclusion of this exercise, you will be able to:

• Define and execute a rollup



For some reports, it may well be useful for the regional managers to aggregate the data at higher levels to accounting groups

1-1 The actual functional area expense costs that have been posted to your company code for the actual period are to be rolled into your rollup ledger. The rollup ledger should take over the functional areas 1:1 but the account expense categories (420000 - 429999, 430000 - 439999, 470000 - 479999) are to be substituted into the 3 global accounts 422222, 433333, 477777 correspondingly.

Your rollup ledger should be set up for the table ZZSLT, be rolled up to only, and have the indicators 'd/c' and 'write line items' set. The Ledger should not store Transaction Currency. The Second Currency should not be defined and as Third Currency please choose 80 Ledger Currency. Set the Ledger currency to USD. The rollup version for this ledger is 1. You should assign your company code ACXX to this ledger with Blocking Indicator set to '1' and Fiscal Year Variant to 'K4'.

#### Procedure:

1-2 Create a Rollup Ledger

#### Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  IMG  $\rightarrow$  SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$ Basic Settings $\rightarrow$ Master Data $\rightarrow$ Ledger Create

Group	Rollup Ledger	Group	Rollup Ledger	Group	Rollup Ledger
01	XA	02	XB	03	XC
04	XD	05	XE	06	XF
07	XG	08	XH	09	XI
10	XJ	11	XK	12	XL
13	XM	14	XN	15	XO
16	XP	17	XQ	18	XR

- 1-3 Create Rollup Version 1 for your Rollup Ledger
- 1-4 Assign to your Company Code
- 1-5 Create a Multi-Dimension Rollup Set (GXX-ROLL) to include appropriate sets for

Your Ledger (AA or AR) \* (copy existing Set GXX-LEDGER)

Company Code ACXX (XX = your group number) \* (existing Set GXX-COCODE)

Record Type 0 (Actual data) \* (existing Set GXX-ACTUAL)

Version 1 \* (existing Set GXX-VERS1)

Functional area 0300,0400,0500 (existing Set GXX-FAREAS)

Account number 420000,421000,430000,431000,472000 and 476000 (existing Set GXX-OVERHEAD)

- 1-6 Define 3 Rules for the prerequisites in your substitution activity:
  - a.) GXX-RULE1 (Interval 420000 429999)
  - b.) GXX-RULE2 (Interval 430000 439999)
  - c.) GXX-RULE3 (Interval 470000-479999)

### Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SAP$   $Reference\ IMG 
ightharpoonup Financial\ Accounting 
ightharpoonup Special\ Purpose\ Ledger 
ightharpoonup Tools 
ightharpoonup Maintain\ Validation/Substitution/Rules 
ightharpoonup Maintain\ Logical\ Rules 
ightharpoonup Special\ Purpose\ ledger 
ightharpoonup Line\ item 
ightharpoonup select\ Create$ 

Application area: GL, Callup Point: 0002, User Table: GXX-UTAB

1-7 Cater for Rollup Presetting:

Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SAP$   $Reference\ IMG 
ightharpoonup Financial\ Accounting 
ightharpoonup Special\ Purpose\ Ledger 
ightharpoonup Periodic$  Processing 
ightharpoonup Rollup

- 1-7-1 Create a Substitution Activity (GXXS) for your expense accounts and include your rules and substituted values for the 3 serial numbers required
- 1-7-2 Create a Field Movement (GXXM) for the characteristics you need to transfer. Include your Substitution Activity in this Field Movement. The Receiver and Sender table is ZZSLT

Special Purpose Ledger  $\rightarrow$  Rollup  $\rightarrow$  Maintain Field Movements  $\rightarrow$  Create Rollup Field Movement

#### 1-7-3 Define a standard Rollup GXX-ROLL with one sequence.

The Sender and Receiver table is ZZSLT

Include your Rollup Set in the Rollup header and the processing option;

Write Line Items.

Your sequence should include the field movement and your new rollup ledger

#### 1-8 Rollup Execution:

Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup Special\ Purpose \ Ledger 
ightharpoonup Periodic\ Processing 
ightharpoonup Rollup 
ightharpoonup Execute$ 

Execute your rollup for the current period using Document type R0 and view the results in your rollup ledger

Example for period 1:

*Start date:* **01.01.2XXX** 

*End date:* **31.01.2XXX** 

Take over the option 'Write line items' and use the Document type R0 and Detail list.

View the resulting protocol and then use the summary display in FI-SL to control the results of the rollup in your rollup ledger.

### 1-9 **OPTIONAL** Report Painter report

As a further check on your rollup results define a new report GXX-RLUP 'Rollup Expenses' to your Library LXX, assign this to a report group RXX1 (XX= your Group Number), execute and view the report results:

Sample Result: GXX-RLUP

FA 0300 Grp. act. FA 0400 Grp. act. FA 0500 Grp.act.

Expense groups

**Account 422222** 

Account 433333

Account 477777

General Selection:

**Ledger:** Your Rollup Ledger

Version 1

Your Company Code

Current Year

## Current Period



For the Row of your report define a Basic Set, GXX-AGROUPS (XX = your group number)

Set: GXX-AGROUPS (Field RACCT) 'Group Expenses'

Short text

001 422222 Wage Expenses

002 433333 Salary Expenses

003 477777 General other expenses



**Unit: Rollups** 

**Topic: Definition and Execution of a Rollup** 

1-1 The actual functional area expense costs that have been posted to your company code for the actual period are to be rolled into your rollup ledger. The rollup ledger should take over the functional areas 1:1 but the account expense categories (420000-429999, 430000-439999, 470000-479999) are to be substituted into the 3 global accounts 422222, 433333, 477777 correspondingly.

Your rollup ledger should be set up for the table ZZSLT, be rolled up to only, and have the indicators 'd/c' and 'write line items' set. It should only store the Ledger currency USD. The rollup version for this ledger is 1. You should assign your company code ACXX to this ledger with Blocking Indicator set to '1' and Fiscal Year Variant to 'K4'.

Procedure:

1-2 Create a Rollup Ledger

Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  IMG  $\rightarrow$  SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$ Basic Settings $\rightarrow$ Master Data $\rightarrow$ Maintain Ledger  $\rightarrow$ Create Ledger

Ledger: (XA to XR)

Description: Rollup Ledger Group XX

Basic settings:

Summary table: **ZZSLT** 

Additional Settings:

X Rollup allowed

X Write line items

X Maint. D/C indicator

Stored currencies:

No Transaction or Second Currency

Choose as Third Currency 80 Ledger Currency and set the Ledger Currency to USD):

X Ledger currency USD

No quantities

1-3 Button 'Versions'

Version 1 Rollup x Version Description 'Rollup Version 1'

Save

1-4 Assign to your Company Code

Button Assign comp.cd/comp

Field Name or Data Type	Values

Assign Co.Code ACXX

Assignment criteria:

Blocking indicator: 1

Fiscal year variant: K4



Since you have created this Ledger as a "Roll Up Ledger, no Activities need to be assigned for the ledger to update properly. The Roll Up Procedure and your configuration with control what data is passed to your ledger.

Save

1-5 Create a Multi-Dimension Rollup Set (GXX-ROLL) to include appropriate sets Application menu Special Purpose Ledger:

 $Tools \rightarrow Set \ maintenance \rightarrow Set \ Maintenance \rightarrow Set \rightarrow Create$ 

Set ID: GXX-ROLL

Table: ZZSLT

Set Type: Multi Set

Enter

Create Set Header:

Description: 'Roll-Multi Group XX'

*GoTo→Subordinate Sets (Or use the hierarchy symbol on the Tool Bar)* 

Create Set: Basic Entries

Set Set short text

 $\begin{array}{ll} \text{GXX-LEDGER} & \text{Your Ledger } (\text{AA} - \text{RR}) \\ \text{GXX-ACTUAL} & (\text{RRCTY} = 0) \text{ Actual} \\ \text{GXX-COCODE } (\text{Co.Code} = \text{ACXX}) & \text{Company Code } \text{ACXX} \\ \end{array}$ 

GXX.VERS1 (Version = 1) Version 1

GXX-FAREAS Functional areas
GXX-OVERHEAD Overhead Accounts

- 1-6 Define 3 Rules for the prerequisites in your substitution activity:
  - a.) GXX-RULE1 (Interval 420000 429999)
  - b.) GXX-RULE2 (Interval 430000 439999)
  - c.) GXX-RULE3 (Interval 470000-479999)

#### Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup SAP$   $Reference\ IMG 
ightharpoonup Financial\ Accounting 
ightharpoonup Special\ Purpose\ Ledger 
ightharpoonup Tools 
ightharpoonup Maintain\ Validation/Substitution/Rules 
ightharpoonup Maintain\ Logical\ Rules 
ightharpoonup Special\ Purpose\ ledger 
ightharpoonup Line\ item 
ightharpoonup select\ Create\ icon$ 

Rule name: GXX-RULE1 Description: Accounts 420000 – 429999

Select the text in the menu path 'Rule Definition'. You are placed in the Formula Builder screen

*User Table:* **GXX-UTAB** 

Select Account number:

Select >=

Select Constant. Enter the Account Number 420000

Rule: Account number >= '420000' AND Account number <= '429999'

Continue until the rule is complete. Verify that you have the green status light

Save.

Define the rules GXX-RULE2 and GXX-RULE3 in the same way with the other intervals.

1-7 Additional Rollup Presettings:

Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  IMG  $\rightarrow$  SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Periodic Processing  $\rightarrow$  Rollup

1-7-1 Create a Substitution Activity (GXXS) for your expense accounts and include your rules and substituted values for the 3 serial numbers required

Rollup → Maintain Substitution

Press Button 'New Entries'

SubAct.	No	Sum.Table	Rec.field	Const.value	Rule
<b>GXXS</b>	001	ZZSLT	RACCT	0000422222	GXX-RULE1
GXXS	002	ZZSLT	RACCT	0000433333	GXX-RULE2
<b>GXXS</b>	003	ZZSLT	RACCT	0000477777	GXX-RULE3
Sa	ave				



Make sure you repeat the Substitution name in each level as defined above.

Any leading zeros for alphanumeric fields must be entered manually, as in the condition 000001000 (cost center-10 characters)

1-7-2 Create a Field Movement (GXXM) for the characteristics you need to transfer. Include your Substitution Activity in this Field Movement. The Receiver and Sender table is ZZSLT

Special Purpose Ledger  $\rightarrow$  Rollup  $\rightarrow$  Maintain Field Movements  $\rightarrow$  Create Rollup Field Movement

Field Movement: **GXXM** (XX = your group number)

Enter

Description: 'Field Movement for Rollup Group XX'

Receiver table: **ZZSLT** 

Sender table: **ZZSLT** 

Rec.fld Send.fld SubActivt

RFAREA RFAREA

RACCT RACCT GXXS

Save

1-7-3 Define a standard Rollup GXX-ROLL with one sequence.

The Sender and Receiver table is ZZSLT

Include your Rollup Set in the Rollup header and the processing option; Write Line Items.

Your sequence should include the field movement and your new rollup ledger

Application menu $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Periodic processing  $\rightarrow$  Rollup  $\rightarrow$  Create

Initial Screen:

Rollup: **GXX-ROLL** (XX = your group number)

Rollup type:

Standard

Press Button 'Rollup Header'

Title: 'Functional area Expenses → Account groups'

Sender table: **ZZSLT**Receiver table: **ZZSLT** 

Rollup set: **GXX-ROLL** 



View the Roll Set you have created by double clicking on the Set ID. Roll Sets are an excellent place to use variables. Variables in Roll Sets will make your Roll Up Sequences more flexible

Press Button 'Processing option.'

x Write line items

Continue

Press Button 'Rollup sequence'

Enter Field movement GXXM and your Rollup Ledger (Ledger XA – XR)

Save Rollup Definition

### 1-8 Rollup Execution:

Menu Path:

 $SAP\ Easy\ Access 
ightharpoonup SL: Reporting\_Analyst 
ightharpoonup Special\ Purpose \ Ledger 
ightharpoonup Periodic\ Processing 
ightharpoonup Rollup 
ightharpoonup Execute$ 

Execute your rollup for the current period and view the results in your rollup ledger.

Rollup: GXX-ROLL

Execute

Parameters:

From and To Period: Current Period

(*Start date:* **01.01.20XX** 

*End date:* **31.01.20XX**)

(Example here for period 1)

Processing options:

x write line items

Doc. Type: R0

x Detail list

Execute

View the results with the help of FI-SL Summary Records (and Document) Display.

### 1-9 **OPTIONAL** Report Painter report

As a further check on your rollup results define a new report GXX-RLUP 'Rollup Expenses' to your Library LXX, assign this to a report group RXX1 (XX= your Group Number), execute and view the report results:

Sample Result: **GXX-RLUP** 

FA 0300 Grp. act. FA 0400 Grp. act. FA 0500 Grp.act.

Expense groups Account 422222

Account 433333

**Account 477777** 

General Selection:

Ledger: Your Rollup Ledger

Version: 1

Your Company Code

Current Year

**Current Period** 



For the Row of your report define a Basic Set, GXX-AGROUPS (XX = your group number)

Set: GXX-AGROUPS (Field RACCT) 'Group Expenses'

Short text

001 422222 Wage Expenses

002 433333 Salary Expenses

003 477777 General other expenses

Definition:

In 'Lead column' Insert 'Expense groups'

Double click on Row 1:

**Choose Characteristics:** 

Account number

Line of Business

Group: GXX-AGROUPS

Enter texts:

Short: Expenses

Medium: Expenses

Long: Expenses

Continue

Position cursor on Row 1 and double click on ICON 'Explode'

**Sort Characteristics:** 

Single values

1. Account number x

Continue.

Double click on Column 1

Select Element type:

Predefined Key Figure

Group curr. act..

Key figures

Group currency

Choose characteristics:

Record type

Functional area

Record type: **0** 

Functional area: 0300

Short text: F0300Gr.act

Medium text: FA 0300 Grp. act.

Long Text: FA 0300 Grp. act.

Continue

Double click on Column 2

Select Element type:

Predefined Key Figure

Group curr. act..

Key figures

Group currency

Choose characteristics:

Record type

Functional area

Record type: **0** 

Functional area: **0400** 

Short text: F0400Gr.act

Medium text: FA 0400 Grp. act.

Long Text: FA 0400 Grp. act.

Continue

Double click on Column 3

Select Element type:

Predefined Key Figure

Group curr. act..

Key figures

Group currency

Choose characteristics:

Record type

Functional area

Record type: **0** 

Functional area: **0500** 

Short text: **F0500Gr.act** 

Medium text: FA 0500 Grp. act.

Long Text: FA 0500 Grp. act.

Continue

 $\rightarrow$  Edit

Gen. .data selection:

Change

Pick Characteristics:

Ledger

Version

Fiscal year

Company code

Period

Continue

Enter Characteristic Values:

Ledger: your Rollup Ledger (XA-XR)

Version: 1

Fiscal year: Current year

Company code: your Company .Code ACXX

Period: Current Period

Continue.

Check your report.

 $\rightarrow$  Report  $\rightarrow$  Check

Save your report.

Assign your report to a report group:

 $\rightarrow$  Environment  $\rightarrow$  Assign report group

Report group: **RXX1** (XX = your group no.)

Continue Confirm creation

Execute.

 $\rightarrow$  Report  $\rightarrow$  Execute

Rollup Expenses: Selection

Execute:

View the output of your rollup results.

## Conclusion



- Course Objectives
- Course Goals
- Course overview Diagram
- Summary of the main features
- Main Business Scenario
- Recommended Follow-up Activities in Your Own Environment

## **Course Objectives**





You will now be able to:

- Explain the main purpose of FI-SL and the flow of information into the application
- Identify the basic characteristics and key figures of the FI-SL environment and determine the requirements to establish a a new field for FI-SL
- Define a new coding block field in test mode
- Define a new table group in the repository and install a table group in FI-SL
- Identify preliminary resource issues prior to populating the FI-SL database
- Create FI-SL master data, define the organizational structure of FI-SL and list the options for summary and single item data to be stored in the ledgers

## **Additional Course Objectives**





You will now be able to:

- Transfer data into FI-SL from outside the application area
- Create adjustments postings in FI-SL using versions
- Analyze the master data settings and postings to Special Purpose Ledger using the Display and Diagnostic tools
- Explain the need for Validation and Substitution in FI-SL.
   Define and use both
- Specify the different types of Sets and Variables, identify the areas in FI-SL where they are used and create sets and variables for use in FI-SL
- Define reports using Report Painter and execute reports in a report group
- Define the planning parameter components, enter plan data and control the results of planning in FI-SL

# **Additional Course Objectives (1)**





You will now be able to:

- Create Allocation segments and cycles and perform allocations in FI-SL
- Define and execute Rollups in FI-SL

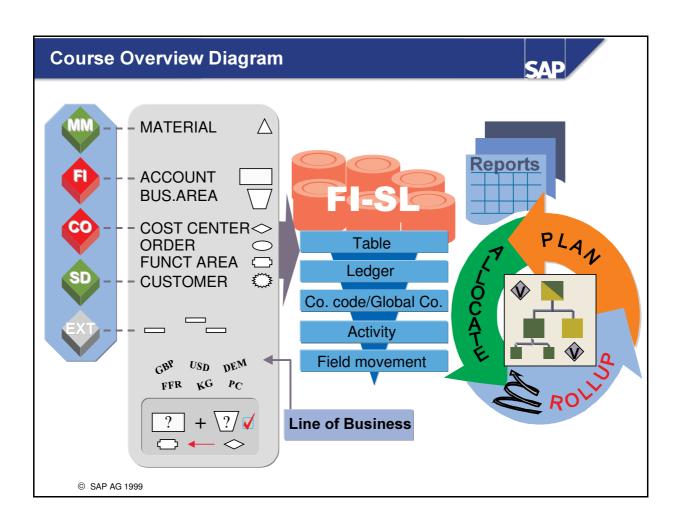
## **Course Goals**

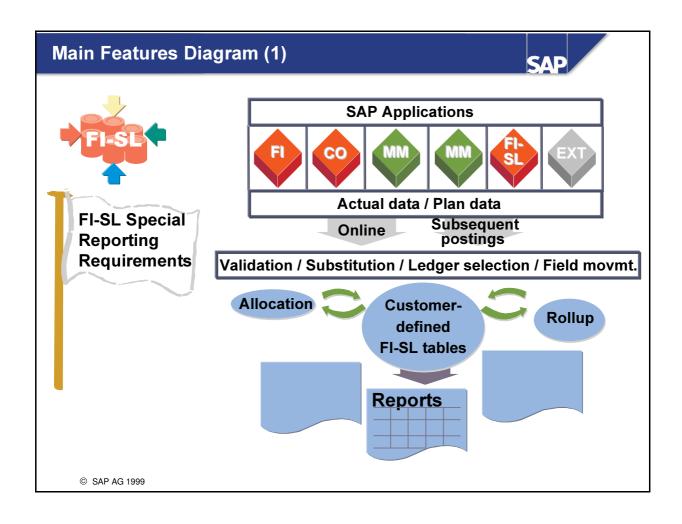


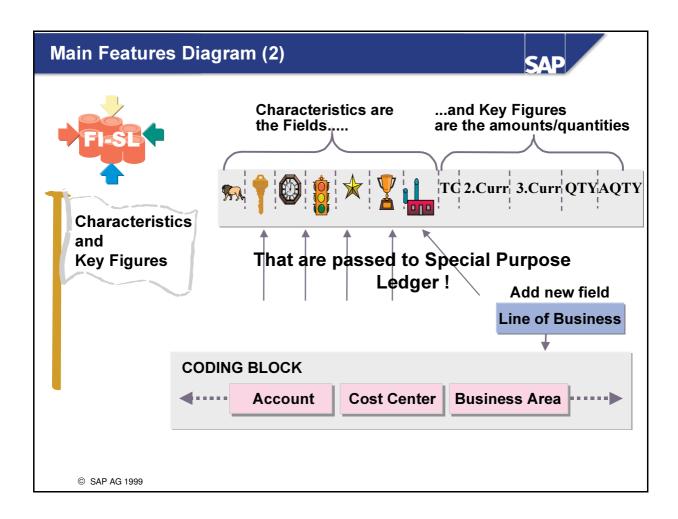
13-5

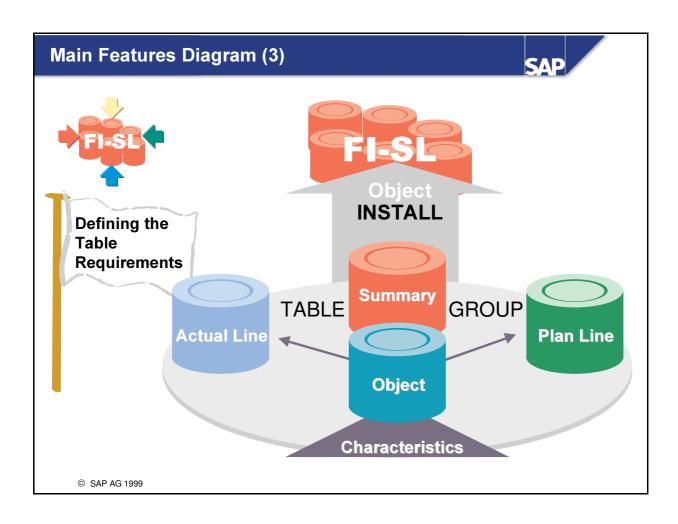


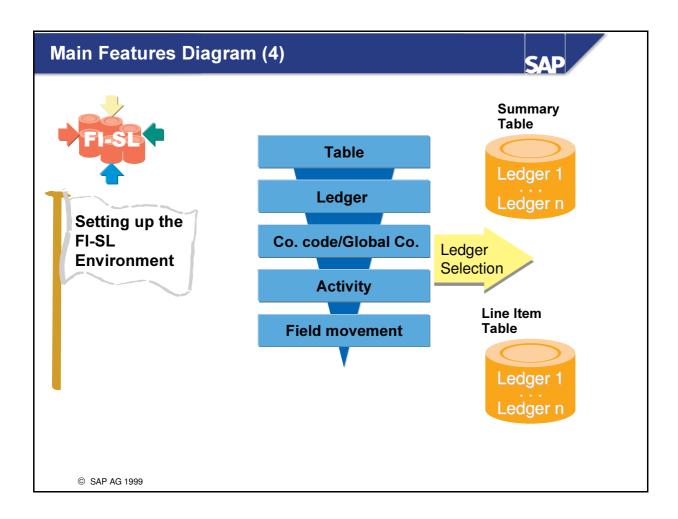
- Acquire conceptual knowledge and hands on experience of managing data and reporting in FI-SL
- Become familiar with the FI-SL functionality and learn how to use the various FI-SL components

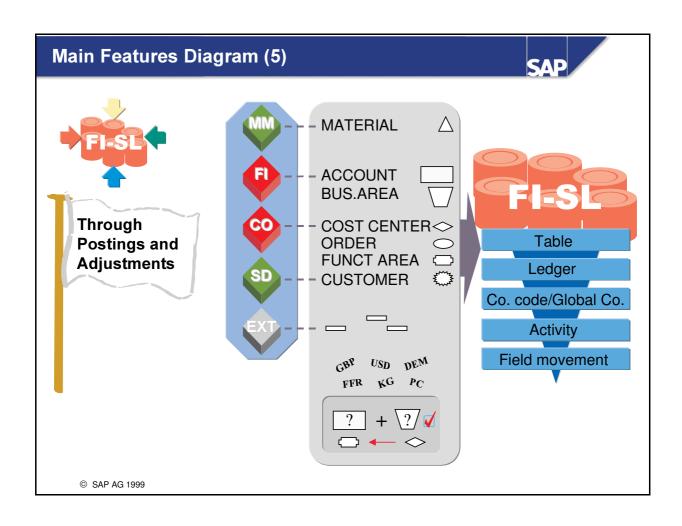


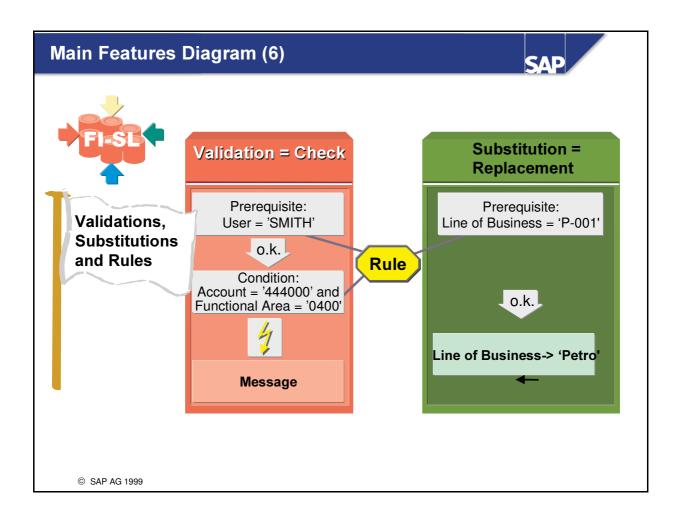


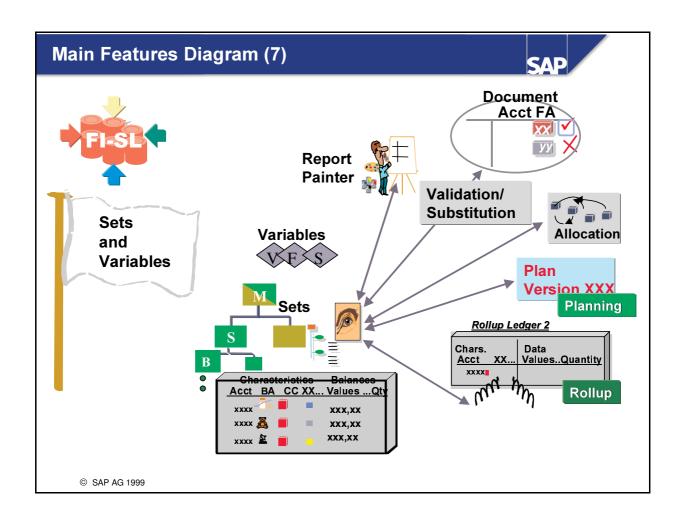


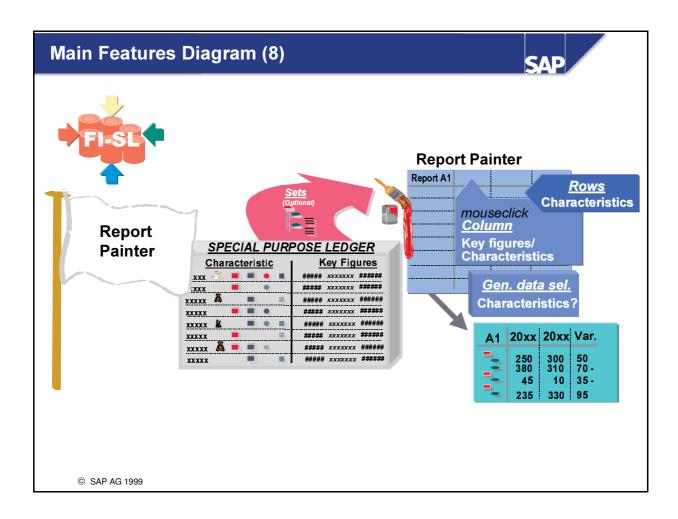


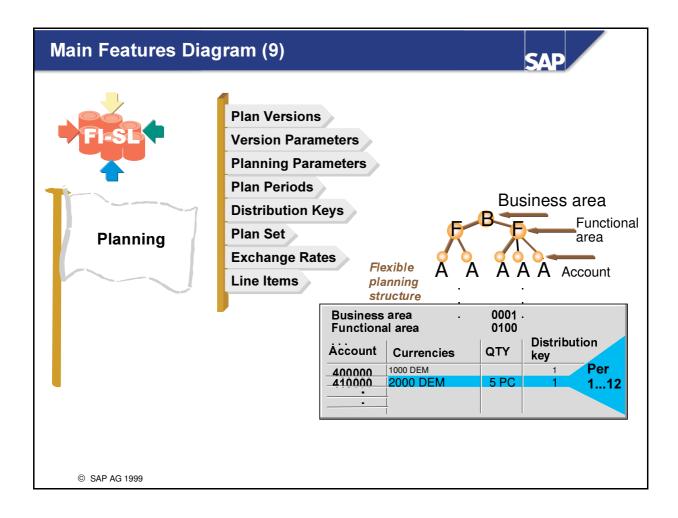


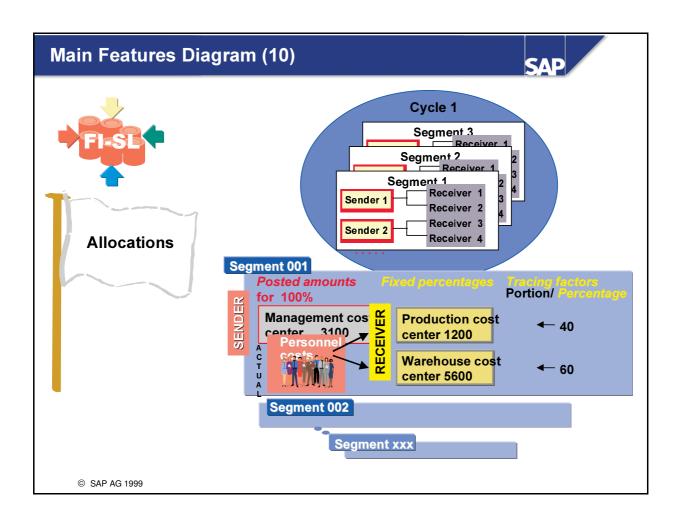


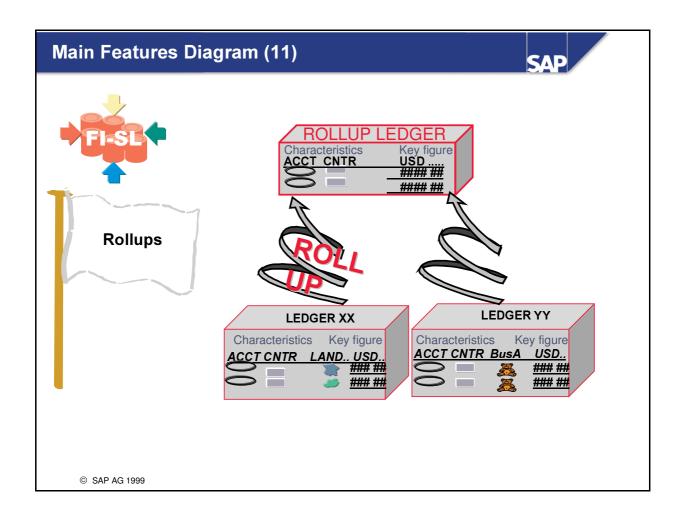












### **Main Business Scenario (1)**





- Our Company has a fairly rich management reporting requirement. Most of the information needed comes from other application areas but must be regrouped and further enhanced as well as being in some cases refined to provide summarized data in chosen combinations. The concepts and design of the component FI-SL must be investigated to discover whether it is flexible enough to serve these special needs
- Management responsibility crosses Lines of Business and product lines. The costs involved in supporting the sale of products have to be analyzed against the revenues they have produced.

### **Main Business Scenario (2)**





- A specific requirement is to provide a breakdown of these costs by 'functional areas' such as manufacturing, general administration, sales and research & development. Is FI-SL able to derive this information and how could this be reported?
- Later these functional area costs will have to be set against the revenues generated in Line of Business (new characteristic), and used for allocation, planning, further aggregation and other reports.

## **Recommended Follow-Up Activities**



- Go through the same exercises, using IDES or your own data
- Read through the appendix
- Read on-line documentation
- Read release notes

### **Exercises**



**Unit: Conclusion** 

**Topic: Optional follow-up Exercise examples** 



At the conclusion of this exercise, you will be able to:

Follow-up Exercises in Postings with Substitutions, Planning, Rollup and Report Painter



These optional follow-up example exercises give you the chance to reinforce the knowledge you have gained throughout this course and will give you additional practice in almost all the techniques required to understand the handling of data within the Special Purpose Ledgers.

### 1-1 Direct FI-SL Postings (to your Ledger AA-RR)

Direct FI-SL postings, Substitution and User-Exit for the Field Movement (example Material number)

These postings are to be made for **Version 3** actual data.

Use your User table GXX-UTAB and document type A2.

The following set of document lines should be posted for the **first two periods** of the current quarter year:

Example: if the current quarter year is 1 then you should repeat the following document lines for

- a.) January (Period 1)
- b.) February (Period 2)

Account	<b>Business Area</b>	Line of Business	Material no.	Amount USD	
800200	0001	PTRO	T-IC-F1001	1,000.10-	
800200	1500	PTRO	T-IC-F1002	2,000.20-	
800200	1500	PTRO	T-IC-R2008	3,000.30-	
800200	8000	CHEM	T-IC-F1002	4,000.40-	
800200	9000	CHEM	T-IC-F1003	5,000.50-	
800300	0001	PTRO	T-IC-F1002	1,000.10-	
800300	1500	PTRO	T-IC-R2008	2,000.20-	
800300	8000	CHEM	T-IC-F1003	3,000.30-	
800300	8000	CHEM	T-IC-F1002	4,000.40-	
800300	9000	CHEM	T-IC-R2009	5,000.50-	
			(N	Jegative amounts	;

Further stipulations:

The Business Areas 0001 and 1500 should be substituted into the Business Area **RETL** ('Retail')

The Business Areas 8000 and 9000 should be substituted into the Business Area **WSLE** ('Wholesale')

Create an FI-SL Substitution for: GXXBUSA

The Material numbers you enter, will be substituted into the categories

FormulaA, FormulaB and FormulaC

For this to take place, you need to enter the User-Exit **U55** for your Material number (RMATNR) in the Field Movement. Add this to your Field Movement SPXX (XX = your group number) accordingly. (Refer to the example Exit-Routine in the solution appendix)

The target ledger is your Ledger AA-RR. FI-SL Document Type is A2.

Note the document number posted and view the results.

1-2 Planning to your Ledger AA-RR

Plan presettings, Plan parameters, Plan execution and control of the Plan results You should now plan the revenues expected in your Lines of Business PTRO and CHEM by product

Your planning should be made in **Version 2**.



Hint: Neither plan version 2 or plan version parameters exist. You have to set these up first.

Don't forget to activate single items after you have done this! The Document type is PL.

Your plan parameter GXX-REPR should take the following into account:

- 1-2-1 You should plan the revenues (RACCT 800200, 800300) to be made for the 3 product groups, (RMATNR: FormulaA, FormulaB and FormulaC) in the 2 Lines (RZZLOB: PTRO and CHEM). For this you will need a new Multi Set GXX-LINE-MAT (see below). Planning will be done in just the 3rd.Currency USD. The periods to be planned are 1-12 and the totals are to be evenly distributed over the 12 periods.
- 1-2-2 Please ensure that for each combination; ACCOUNT, LINE and PRODUCT GROUP your total amount **does not exceed 20,000- USD** (negative amounts). The exchange rate type is P.
- 1-2-3 After you have entered your planned data view the summary records and the planned documents.

Note: For the 2 Revenue accounts (800200, 800300) you will need to define a new set **GXX-REV12** 'Revenues 1-2' to RACCT in ZZSLT and for the 3 product groups a new set **GXX-PRODGROUPS** 'Product Groups' to RMATNR in ZZSLT with the entries FormulaA, FormulaB and FormulaC.

In addition you have to define a new Set **GXX-PTRO-CHEM** 'Lines Ptro/Chem' with entries for PTRO and CHEM to RZZLOB in ZZSLT

Your Plan Multi Set GXX-LINES-MAT 'Lines/Prod.Groups' will include your Basic Sets GXX-REV12, GXX-PTRO-CHEM and GXX-PRODGROUPS.

Plan document type is PL

#### 1-3 Rollup

Rollup presettings, Substitution and use of a User-Exit for rounding amounts New Rollup Ledgers to be defined:

Group	Rollup Ledger	Group	Rollup Ledger	Group	Rollup Ledger
01	YA	02	YB	03	YC
04	YD	05	YE	06	YF
07	YG	08	YH	09	YI
10	YJ	11	YK	12	YL
13	YM	14	YN	15	YO
16	YP	17	YQ	18	YR

The data you posted to your ledger (AA-RR) in exercise A for the first 2 periods of the current quarter should now be rolled up into your new rollup ledger. This rollup ledger should be defined for the table ZZSLT, be rolled up to only, and have the indicators 'd/c' and 'Write line items' set. It should only store the Ledger currency USD. The rollup version for this ledger is 3. You should assign your company code ACXX to this ledger with Blocking Indicator set to '1'. This roll up ledger should hold the quarterly results for the company lines' revenues and therefore be assigned to the Fiscal Variant 'Q1'

The LINES (Ptro and Chem) and the product groups (FormulaA, FormulaB and FormulaC) should be rolled up to 1:1. The Business areas should **not** be taken over and the USD amounts should be rounded to full dollar amounts (Revenue accounts 800200, 800300). For this assign the User-Exit **U02** to the Field Movement header 'User exit before update'.

(Refer to the example Exit-Routine in the solution appendix)

Rollup: GXX-RUP2

*New Field Movement:* **GXXZ** (XX = your group number)

New Rollup Set to be created: **GXX-ROL2.** (As a help you can reference this on the example Set TR-ROLLSET2)

The Rollup Document type is R0

1-4 Second and Final Report GXX-FINA, Library LXX. Report Group FIXX.

Report Painter and listing of the planned and rolled up actual data in the two different ledgers

This report should reflect the results of your planning and roll up of your actual data. This is a SAMPLE RESULT for a final report (example for Q1, Per. 1–3):

Roll. Ledger Vers3 Grp. Curr. Actual / Original Ledger Vers2 Grp. Curr. Plan

Fiscal Year: 20xx Current Quarteryear

-----

Actual Plan Variance

Revenue/Prod.

800200

800300

**FORMULAA** 

800200

800300

**FORMULAB** 

800200

800300

**FORMULAC** 

**PTRO** 

800200

800300

**FORMULAA** 

800200

800300

**FORMULAB** 

800200

800300

**FORMULAC** 

**CHEM** 

LINES PTRO-CHEM

General Selection:

Company Code SLXX

Current Fiscal Year



**Unit: Conclusion** 

**Topic: Optional follow-up Exercise Examples** 

### 1-1 Direct FI-SL Postings (to your Ledger AA-RR)

Direct FI-SL postings, Substitution and User-Exit for the Field Movement (example Material number)

These postings are to be made for Version 3 actual data.

Use your User table GXX-UTAB and document type A2.

The following set of document lines should be posted for the first two periods of the current quarter year:

Example: if the current quarter year is 1 then you should repeat the following document lines for

- a.) January (Period 1)
- b.) February (Period 2)

Account	Business Area	Line	Material no.	Amount USD
800200	0001	PTRO	T-IC-F1001	1,000.10-
800200	1500	PTRO	T-IC-F1002	2,000.20-
800200	1500	PTRO	T-IC-R2008	3,000.30-
800200	8000	CHEM	T-IC-F1002	4,000.40-
800200	9000	CHEM	T-IC-F1003	5,000.50-
800300	0001	PTRO	T-IC-F1002	1,000.10-
800300	1500	PTRO	T-IC-R2008	2,000.20-
800300	8000	CHEM	T-IC-F1003	3,000.30-
800300	8000	CHEM	T-IC-F1002	4,000.40-
800300	9000	CHEM	T-IC-R2009	5,000.50-
(Negative	amounts)			

Further stipulations:

The Business Areas 0001 and 1500 should be substituted into the Business Area RETL ('Retail')

The Business Areas 8000 and 9000 should be substituted into the Business Area WSLE ('Wholesale')

FI-SL Substitution: GXX-BUSA

The Material numbers you enter, will be substituted into the categories

FormulaA, FormulaB, and FormulaC. For this to take place you need to enter the User-Exit U55 for your Material number (RMATNR) in the Field Movement.

(Refer to the example Exit Routine in the solution appendix)

The target ledger is your Ledger (AA-RR).

Note the document number posted and view the results.

a.) Create Version 3 for the posting of actual data in your Ledger

# FI-SL Customizing menu $\rightarrow$ Master Data $\rightarrow$ Menu: Maintain Ledgers $\rightarrow$ Change

Define Version 3 for Actual Data

**Button: Versions** 

Version Act. Version description.

3 x Vers.3 FI-SL direct

Now save your Ledger.

- b.) Substitution GXXBUSA
  - 1.) Substitution step 1 pre-requisite:

Business area = '0001' OR Business area = '1500'

Substituted value: **RETL** 

2.) Substitution step 2 pre-requisite:

Business area = '8000' OR Business area = '9000'

Substituted value: WSLE

c.) Change Field Movement SPXX (XX = your group number)

Choose Line and insert Exit U55:

Recfield Send.table Send.fld Exit

RMATNR GLU1 MATNR U55

Save

d.) Enter FI-SL document lines and view the results of your posting (Document Display in FI-SL)

1-2 Planning to your Ledger (AA - RR)

You should now plan the revenues expected in your Lines PTRO and CHEM for your products.

Your planning should be made in Version 2.



Hint: Neither plan version 2 or plan version parameters exist. You have to set these up first.

Don't forget to activate single items after you have done this! The document type is PL.

Your plan parameter GXX-REPR should take the following into account:

- 1-2-1 You should plan the revenues (RACCT 800200, 800300) to be made for the 3 product groups, (RMATNR: FormulaA, FormulaB and FormulaC) in the 2 Lines (RZZLOB: PTRO and CHEM). For this you will need a new Multi Set GXX-LINES-MAT (see below). Planning will be done in just the 3rd.Currency USD. The periods to be planned are 1-12 and the totals are to be evenly distributed over the 12 periods.
- 1-2-2 Please ensure that for each combination; ACCOUNT, LINE and PRODUCT GROUP your total amount **does not exceed 20,000- USD** (negative amounts). The exchange rate type is P.
- 1-2-3 After you have entered your planned data view the summary records and the planned documents.

Procedure:

Pre-settings

a.) Create Plan Version 2 for your Ledger (AA-RR)

Your Ledger, Version 2, Manual Planning, Version description e.g. 'Line planning version for product groups'

b.) Create Plan Version Parameters for your company, ledger, version 2, and current year

Planning → Version Parameters → Maintain Local Version Parameters

New Entries:

Ledger: Your Ledger Version: Version 2

Company Code: ACXX (XX = your group number)

Fiscal Year: Current Year

Save

c.) Activate Line items (*Document Type*: **PL**)

Planning  $\rightarrow$  Activator Line Items  $\rightarrow$  Activate Local Line Items

Ledger: Your Ledger

Version: 2

Company Code: ACXX (XX = your group number)

Fiscal Year: Current Year

Document type: PL

Save as Variant GXX-PLN1

d.) Create Planning Parameters **GXX-REPR** (XX= your Group-no.)

 $Planning \rightarrow Maintain \ Planning \ Parameters \rightarrow Create \ planning \ parameters$ 

Plan parameters: **GXX-REPR** 

General part:

Description: 'Line planning version for product groups'

Parameter class: GL

Plan periods:

From period: 1
To period: 12
Period frequency: 1

Distribution key default values:

Currency amounts: 1
Ouantities: 1

Overview screen default values:

Display field contents x

Display field descriptions x

FI-SL part:

Set ID: GXX-LINES-MAT (Table ZZSLT)

(This Multi Set, which you have to define first should incorporate a Basic Set for RACCT – GXX-REV12 (new Set), a Basic Set for RMATNR – GXX-PRODGROUPS (new Set) and a Basic Set for RZZLOB – GXX-PTRO-CHEM)

Field groups:

Plan manually Display on initial screen *Trans.curr*.

Second curr.

Third curr.  $\mathbf{x}$ 

Quantity **x** 

Add.quantity

Document type: PL
Exchange rate type: P

Save your plan parameters.

#### e.) Plan execution

1.) Enter plan values

Application Special Purpose Ledger  $\rightarrow$  Planning  $\rightarrow$  Local planned values

Enter

Company code: ACXX

Ledger: Your Ledger

Version: 1

Fiscal year: Current Year Plan parameters: GXX-REPR

Overview screen:

Leave Quantity blank!

Enter values for your combinations using the distribution key 1 (equal distribution)

2.) View Plan summary records and single items

Application Special Purpose Ledger  $\rightarrow$  Planning  $\rightarrow$  Display totals

(Record type is 1)

### 1-3 Rollup

New Rollup Ledgers to be defined:

Group	Rollup Ledger	Group	Rollup Ledger	Group	Rollup Ledger
01	YA	02	YB	03	YC
04	YD	05	YE	06	YF
07	YG	08	YH	09	YI
10	YJ	11	YK	12	YL
13	YM	14	YN	15	YO
16	YP	17	YQ	18	YR

The data you posted to your ledger (AA - RR) in exercise A for the first 2 periods of the current quarter should now be rolled up into your new rollup ledger. This rollup ledger should be defined for the table ZZSLT be rolled up to only, and have the indicators 'd/c' and 'Write line items' set. It should only store the Ledger currency USD. The rollup version for this ledger is 3. You should assign your company code ACXX to this ledger with Blocking Indicator set to '1'. This roll up ledger should hold the quarterly results for the company regions' revenues and therefore be assigned to the Fiscal Variant 'Q1'

The LINES (PTRO and CHEM) and the product groups (FormulaA,FormulaB, and FormulaC) should be rolled up to 1:1. The Business areas should **not** be taken over and the USD amounts should be rounded to full dollar amounts (Revenue accounts 800200, 800300). For this, assign the User-Exit **U02** to the Field Movement header 'User exit before update'.

(Refer to the example Exit Routine in the solution appendix)

a.) Create a Ledger

FI-SL Customizing Menu: Maintain Ledgers → Create

Ledger: YA to YR (see exercise)

Description: Rollup Ledger 2 for Group XX

Basic settings:

Summary table: **ZZSLT** 

Additional settings:

Ledger post. Allowed x Rollup allowed Set up balance c/f x Write line items

x Maintain d/c indicator Productive

Summarize

Stored currencies:

NO Transaction currency

 $\rightarrow$  Define currencies

Choose combination:

2nd. curr. not defined 80 Ledger currency

x Ledger currency Ledger currency USD

Stored quantities: NONE (x = the only required choices)

b.) Define Version 3 for Rollup Data

 $Menu \rightarrow Versions$ 

Version Act. Manual plan Rollup Version descrptn.

3 v Version 3 RUP

Now save your Ledger.

c.) Assign your Company code ACXX to this Ledger

Create Ledger: Assign Company Code

CoCd.: ACXX Ledger: YA (YB...YR)

Assignment criteria:

Blocking indicator: 1
Fiscal year variant: Q1

enter!

Now save your Assignment Ledger/Co.Code!

d.) Create a Multi-Dimension Rollup Set (GXX-ROL2) to include appropriate Sets. (As a help you can reference this on the example Set TR-ROLLSET2, or create new Basic Sets to be included)

Application menu Special Purpose Ledger:

 $Tools \rightarrow Set \ maintenance \rightarrow Sets \rightarrow Create$ 

Set ID: GXX-ROL2

Table: **ZZSLT** 

Header:

Description: 'Roll Lines Multi Group XX'

Set lines:

Set ID Set short text

GXX- LEDGER Ledger AA(or..RR)

GXX-ACTUAL (RRCTY = 0) Actual

GXX-COCODE (Co.Code = ACXX) Company Code ACXX

GXX.VERS3 (Version = 3) Version 3

(new Basic Set to include Version 3)

GXX-PTRO-CHEM Lines PTRO-CHEM

GXX-PRODGROUPS Products

GXX-BUSA Bus. Areas

(new Basic Set to contain the Business areas RETL and WSLE)

GXX-REV12 Revenues

e.) Create a Field Movement (GXXZ) for the characteristics you need to transfer. Include the Exit 02 in the Field Movement Header for the Balance upgrades: The Receiver and Sender table is ZZSLT

# FI-SL Customizing $\rightarrow$ Rollup $\rightarrow$ Maintain Field Movements $\rightarrow$ Create Rollup Field Movement

*Field Movement:* **GXXZ** (XX = your group number) Enter

Description: 'FM 2 Rollup Group XX'

Receiver table: ZZSLT Sender table: ZZSLT

User exit before update U02

Rec.fld Send.fld SubActivt

RACCT RACCT
RZZLOB RZZLOB

RMATNR RMATNR

Save Field Movement **GXXZ**.

### f.) Rollup Definition:

Define a standard Rollup GXX-RUP2 with one sequence.

The Sender and Receiver table is ZZSLT

Include your Rollup Set in the Rollup header and the processing options; Write Line Items.

Your sequence should include the field movement and your new rollup ledger

# Application menu Special Purpose Ledger $\rightarrow$ Periodic processing $\rightarrow$ Rollup $\rightarrow$ Create

Initial Screen:

Rollup: **GXX-RUP2** (XX = your group number)

Rollup type:

Standard

Press Button 'Rollup Header'

Title: 'LIne Revenues for Product groups'

Sender table: **ZZSLT**Receiver table: **ZZSLT** 

Rollup set: **GXX-ROL2** 

Press Button 'Processing optn.'

x Write line items

Continue

Press Button 'Rollup sequence'

Enter Field movement GXXZ and your Rollup Ledger YA - YR

Save Rollup Definition

### g.) Rollup Execution:

Menu Path:

Menu Path:

SAP Easy Access → Activity Group SL:Reporting\_Analyst→ IMG→Customizing

# SAP Reference IMG $\rightarrow$ Financial Accounting $\rightarrow$ Special Purpose Ledger $\rightarrow$ Periodic Processing $\rightarrow$ Rollup $\rightarrow$ Execute

Execute your rollup for the current period and view the results in your rollup ledger

Rollup: GXX-RUP2

Execute

Parameters:

From Period: 01 To Period: 03

From and To Fiscal Year: Current Year

(Start date: 01.01.Current year End date: 31.01.Current Year)

This is an example if the current Quarter is 1

Processing options:

x write line items

Doc. Type: R0

x Detail list

Execute

View the results with the help of FI-SL Summary Records (and Document) Display.

### 1-4 Second and Final Report GXX-FINA 'Ledger Comparison'

Report Group: FIXX ( XX = your Co.Code). This report should reflect the results of your planning and roll up of your actual data.

Roll. Ledger Vers3 Grp. Curr. Actual / Original Ledger Vers2 Grp. Curr. Plan

Fiscal Year: 20xx Current Quarter year

Actual Plan Variance

Revenue/Prod.

800200

800300

FormulaA

800200

800300

FormulaB

800200

800300

FormulaC

**PTRO** 

800200

800300

FormulaA

800200

800300

FormulaB

800200

800300

FormulaC

#### **CHEM**

#### LINES PTRO-CHEM

General Selection:

Company Code: ACXX

Current Fiscal Year

Report GXX-FINA Library LXX

In 'Lead column' Insert 'Revenue/Prod.'

Double click on Row 1:

**Choose Characteristics:** 

Account number

Material

Line of Business

Account number

Group: GXX-REV12 (Basic Set)

Material

Group: GXX-PRODGROUPS (Basic Set)

Line of Business

Group: GXX-PTRO-CHEM (Basic Set)

Enter texts:

Short: LINES

Medium: LINES PTRO-CHEM
Long: LINES PTRO-CHEM

Continue

Position cursor on Row 1 and double click on ICON 'Explode'

Sort Characteristics:

	Explode	Single values
a.) Line of Business	X	
b.) Material		X
c.) Account number		X
Continue.		

Example Column 1

Select Element type:

Predefined column

Group currency act.

Key figures

Group currency

Choose characteristics:

Record type

Version

Ledger

Period

Record type: **0** 

Version: 3

Ledger: YA (...YR)

Period: Current Quarter year

Short text: Actual

Medium text: Actual

Long Text: Actual

Continue

Example Column 2

Select Element type:

Predefined column

Group currency plan.

Key figures

Group currency

Choose characteristics:

Record type

Version

Ledger

Period

*Record type:* 1

Version: 2

Ledger: **AA** (...AR)

Period: XX to XX (e.g.: 01 to 03 if the current quarter year is 1)

Short text: Plan
Medium text: Plan

Long Text: Plan

Continue

Double click on Column 3

Select Element type:

Formula

Enter Formula:

X001 - X002

Continue

Short text: Variance
Medium text: Variance
Long text: Variance

Continue

 $\rightarrow$  Edit

Gen. .data selection:

Change

Pick Characteristics:

Company code

Current Fiscal Year

Continue

Enter Characteristic Values:

Company code: GXX-CCD (Value Variable)
Fiscal year: GXX-FYR (Value Variable)

Continue.

Save your report.

Check your report.

 $\rightarrow$  Report  $\rightarrow$  Check

Save your report.

Assign your report to a report group:

 $\rightarrow$  Environment  $\rightarrow$  Assign report group

Report group: FIXX (XX = your group no.)

Continue Confirm.

Execute.

 $\rightarrow$  Report  $\rightarrow$  Execute

View the output of your report.

### Appendix to the Solutions: User-Exit Routines

Example 1: User-Exit for Field Movement

Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst $\rightarrow$ IMG $\rightarrow$ Customizing SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  User Exits  $\rightarrow$  Client dependent:

Appl Area	Ex.prog	Application area
GIMV	ZGIVU800	Variable field movement

### ZGIVU800 is a copy of the SAP example RGIVS000

Programm ZGIVU800

Tables: .....

zzprod.

\*FORM E55 MVC

\*Read ATAB-Table zzprod and retrieval of a global material number

form e55\_mvc using from\_field to\_field.

clear to\_field.

select \* from zzprod

where zzmat eq from\_field.

move zzprod-zzsubmat to to\_field.

endselect.

endform.

#### Table ZZPROD

Field name Key Data element Type Length CheckTable Short text

MANDT MANDT CLNT 3 Client

ZZMAT MATNR CHAR 18 Material number

ZZSUBMAT MATNR CHAR 18 Material number

### Table ZZPROD Contents:

<u>MANDT</u>	<b>ZZMAT</b>	<b>ZZSUBMAT</b>		
400	T-IC-F1001			
401	T-IC-F1002			
402	T-IC-F1003			
403	T-IC-R2007			
404	T-IC-R2008			
405	T-IC-R2009			

#### Menu Path:

SAP Easy Access  $\rightarrow$  Activity Group SL:Reporting\_Analyst  $\rightarrow$  IMG $\rightarrow$ Customizing SAP Reference IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  User Exits  $\rightarrow$  Client dependent:

Appl Area	Ex.prog	Application area
GBRU	ZZLVU800	Rollup User exits

### ZZLVU800 is a copy of the SAP example RGLVU800

### Program ZZZLVU800

## **Appendices**



- Table Group and other Technicalities
- Menu Paths
- Glossary

## TABLE GROUP FIELDS: EXAMPLE GLFUNC

### 1. Object Table 1 GLFUNCO

Account assignment elements (Object/Partner Object)

Field	Description	Key
MANDT	Client	X
<b>OBJNR</b>	Object number	X
DATIV	Valid fr act.fr	
DATIB	Valid fr act.to	
DATPV	Valid f.pln frm	
DATPB	Valid fr pln to	
BUKRS	Company code	
ACCT	Account number	
BUSA	Business area	
FAREA	Functional area	

### 2. Object Table 2 GLFUNCC

Transaction attributes

Field	Description	Key
MANDT	Client	X
<b>OBJNR</b>	Object number	X
OCLNT	Original client	
LOGSYS	Logical system	
<b>RMVCT</b>	Transactn type	
RASSC	Trading partner	

## 3. Summary Table GLFUNCT

Field	Description	Key	Field	Description	Key
RCLNT	Client	X	TSLVT	Bal. c/f TC	
RLDNR		X	TSL01	Total TC	
	Ledger		ISLUI	Total TC	
RRCTY	Record type	X	••••	••••	
RVERS	Version	X	TSL16	••••	
RYEAR	Fiscal year	X			
ROBJNR	Object number	· X	<b>HSLVT</b>	Bal. c/f LC	
COBJNR	Trans.objet no.	<b>X</b>	HSL01	<b>Total LC</b>	
<b>SOBJNR</b>	Partner obj.no	. X	••••	••••	
RTCUR	Currency	X	HSL16	••••	
RUNIT	Base unit	X			
DRCRK	Debit/credit	X	<b>KSLVT</b>	Bal. c/f GC	
RPMAX	Period	X	KSL01	Total LC	
RBUKRS	Company code		••••	••••	
RACCT	Account number	r	KSL16	••••	
RBUSA	Business area				
RFAREA	Functional area	l	<b>MSLVT</b>	Bal c/f Qty	
OCLNT	Original client		MSL01	Qty	
LOGSYS	<b>Logical system</b>		••••	••••	
<b>RMVCT</b>	Transactn type		MSL16	••••	
RASSC	Trading partner	r			
<b>SBUKRS</b>	Partner compC	de	<b>CSPRED</b>	Distr.Key Curi	ſ <b>.</b>
SACCT	Partner accoun	t	<b>QSPRED</b>	Distr. Key Qty	
<b>SBUSA</b>	Send.bus.ar.				
SFAREA	Part. FuncArea	l			

## 3. Actual Line Item Table GLFUNCA

Field	Description Key		Field	Description	Key
RCLNT ber GL_	Client X SIRID Record number	X		CT Document ca FACTIV FI-SL ac	_
RLDNR	Ledger		<b>CPUDT</b>	<b>Entered on</b>	
RRCTY	Record type	CPU	TM E	ntered at	
<b>RVERS</b>	Version		<b>USNAM</b>	User name	
RYEAR	Fiscal year		AWTYP	Ref. procedure	
RTCUR	Currency		AWORG	Referenc org.un	
RUNIT	Base unit				
DRCRK	Debit/credit				
<b>POPER</b>	Posting period				
DOCCT	Document cat.				
DOCNR	Document nr.				
DOCLN	<b>Document line</b>				
RBUKRS	Company code				
RACCT	Account number				
RBUSA	Business area				
RFAREA	Functional area				
OCLNT	Original client				
LOGSYS	Logical system				
RMVCT	Transactn type				
RASSC	Trading partner				
SBUKRS	Partner compCde				
SACCT	Partner account				
<b>SBUSA</b>	Send.bus.ar.				
SFAREA	Part. FuncArea				
TSL	Teurr.				
HSL	LocCurr.				
KSL	GrpCurr.				
MSL	Quantity				

SGTXT Text

**AUTOM** Auto. ID

**DOCTY** Document type

**ACTIV** FI-SL activity

**BUDAT** Posting date

**WSDAT** Value date

**REFDOCNR** Document number

**REFRYEAR** Fiscal year

**REFDOCLN** Line item

### 4. Plan Line Item Table GLFUNCP

Field Description Key	Field	Description Key
RCLNT Client X	<b>TSVLT</b>	Bal c/f TC
GL_SIRID Record number X	TSL01	Total TC
RLDNR Ledger	••••	••••
RRCTY Record type	TSL16	••••
RVERS Version		
RYEAR Fiscal year	HSLVT	Bal c/f LC
RTCUR Currency	HSL01	Total LC
<b>RUNIT</b> Base unit	••••	••••
DRCRK Debit/credit	HSL16	••••
RPMAX Period		
DOCCT Document cat.	KSLVT	Bal c/f GC
DOCNR Document number	KSL01	<b>Total GC</b>
DOCLN Document line	••••	••••
RBUKRS Company code	KSL16	••••
RACCT Account number		
RBUSA Business area	<b>MSLVT</b>	Bal c/f Qty
RFAREA Functional area	MSL01	Quantity
OCLNT Original client	••••	••••
LOGSYS Logical system	MSL16	••••

RMVCT Transactn type

RASSC Trading partner SGTXT Text

SBUKRS Partner compCde AUTOM Auto ID.

SACCT Partner account DOCTY Document type

SBUSA Send.bus.ar. ACTIV FI-SL activity

SFAREA Part. FuncArea BUDAT Posting date

**WSDAT** Value date

**REFDOCNR** Document number

**REFRYEAR** Fiscal year

**REFDOCLN** Line item

**REFDOCCT** Document cat.

**REFACTIV** FI-SL actvty

**CPUDT** Entered on

**CPUTM** Entered at

**USNAM** Username

**AWTYP** Ref. procedure

**AWORG** Referenc org.units

### **Menu Paths**

This is a summary sheet of the menu paths presented during the course. The menus paths are approximately arranged in the sequence performed in the course. You will find in each unit the respective menu paths used in the implementation guide and in the application.

#### General navigation

### Application menu paths:

```
SAP R/3 System: Accounting \rightarrow Financial Accounting \rightarrow Special purpose ledger:
```

```
Functions: Planning - Actual posting - Periodic processing - Information system - Environment - Tools - System - Help
```

### Implementation Guide (IMG):

SAP R/3 System: Tools –Business Engineer – Customizing – Implement projects – SAP Reference IMG:

### Financial Accounting $\rightarrow$ Special Purpose Ledger:

- → Basic Settings
- → Planning
- → Actual Postings
- → Periodic Processing
- → Information System
- $\rightarrow$  Tools

### **Unit – FI-SL Special Reporting Requirements:**

### **Cost of Sales Accounting**

**1.** Cost of Sales Reporting: Information Systems → Accounting → Financial Accounting → Spec.Purpose Ledger → Select report → Cost of Sales Reporting → P&L cost of sales accounting →

Entries: Ledger: 0F

Fiscal year: Current year

Period from: 001

Period to: Current period Company code: 1000

Plan version: 0

Data source: Push button 'Display Extract' Select Extract 'P&L Current year to date' Execute!

Drilldown to other reports:

Mark block: Cursor on block begin  $\rightarrow$  Edit  $\rightarrow$  Select block

Cursor on block end  $\rightarrow$  Edit  $\rightarrow$  Select block

 $\rightarrow$  Goto  $\rightarrow$  Call up report

### Options: 1. Actual line items for table GLFUNCT

### : 2. Period breakdown

For each option you can then drilldown to the documents

### **Customizing Cost of Sales Accounting**

- Functional Areas:: IMG: → Enterprise Structure → Maintain Structure → Definition → Financial Accounting → Maintain functional area
- 2. Prepare cost of sales accounting: IMG → Financial Accounting → Financial Accounting Global Settings → Company Code → Prepare cost of sales accounting:
- 3. Enter Substitution steps for the functional areas and activate the substitution for the company code

### **Unit – Characteristics and Key Figures**

### **Coding Block**

IMG → Financial Accounting → Special Purpose Ledger → Basic Settings → Maintain Coding Block

Coding Block:

- → SAP standard account assignment
- → Customer include structure

 $\rightarrow$  CI\_COBL

New field: Light mode:

 $\rightarrow$  Add Field

New field: Expert mode:

 $\rightarrow$  Account assignment field  $\rightarrow$  Expert mode  $\rightarrow$  Account assignment field (Create domain, create data element etc.)

#### 2. Subscreen:

- → Subscreen:
- $\rightarrow$  Create
- $\rightarrow$  List

### 3. Making new field available for an FI-Posting:

IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Financial Accounting Global Settings  $\rightarrow$  Document  $\rightarrow$  Line Item  $\rightarrow$  Controls  $\rightarrow$  Define posting keys  $\rightarrow$  Posting key (e.g. 40)  $\rightarrow$  Field status  $\rightarrow$  Additional account assignments: Entry as Suppress, Required or Optional

IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Financial Accounting Global Settings  $\rightarrow$  Document  $\rightarrow$  Line Item  $\rightarrow$  Controls  $\rightarrow$  Maintain field status variants:  $\rightarrow$  Field status variant 1000  $\rightarrow$  Field status group (e.g. G004)  $\rightarrow$  Additional account assignments: Entry as Suppress, Required or Optional

## Unit – Defining the Table Requirements

### Viewing an example Table Group:

IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Tables  $\rightarrow$  Display Assignments graphically:

FI-SL table e.g. GLFUNCT

### **Table Group Definition:**

IMG  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  Tables  $\rightarrow$  Definition  $\rightarrow$  Define Table Group

*Table group: z.B. ZZNEW*  $\rightarrow$  *Create: Button 'Local table group (company code):* 

Object table 1: Enter new fields: Set the 'S' (Sender) indicator as required:

→ Use object 2 Object table 2: Enter new fields if needed

Navigate to the other tables: Buttons below: Object 1 – Summary – Act. LI – Plan LI

*Indices:* → *Indices:* Enter new Index ID: Button continue: Enter Field names

Technical characteristics:  $\rightarrow$  Extras  $\rightarrow$  Tech. Characteristics: Enter required currencies, Quantities, Field length 15 or 17: and Maximum number of periods

*Overview of table group:*  $\rightarrow$  *Table group*  $\rightarrow$  *Overview* 

Check table group  $\rightarrow$  Table group  $\rightarrow$  Check

Save table group  $\rightarrow$  Table group  $\rightarrow$  Save: Enter Development class for Customer objects

Table activation: Accept message 'Activate tables and indices and create them in the database'

### **Table Group Installation**

Follow-up functions: Install: read information and carry on:

Specify Table Installation: Components Direct Posting, Master Data, Allocation, Report Writer Additional Actions: Update GLU1 and Update programs (Reference table: Default = GLT1)

### Unit – Setting up the FI-SL Environment

# Master Data: IMG → Financial Accounting → Special Purpose Ledger → Basic Settings → Master Data

- Maintain Activities
- Maintain Field Movements
- Maintain Ledgers
- Maintain Global Companies
- Maintain Company Codes

and in each the relevant assignments, .

# **Unit – Through Postings and Adjustments**

# **Transfer Postings**

Application menu: SAP R/3 System  $\rightarrow$ Accounting  $\rightarrow$  Financial accounting  $\rightarrow$  Special purpose ledger  $\rightarrow$  Periodic processing  $\rightarrow$  Data transfer:

FI / MM / SD / CO / CO stat.key.figures / CO plan data- Object / CO plan data- Document

# **Master Data Validation for FI-SL Postings**

 $IMG: \rightarrow Financial \ Accounting \rightarrow Special \ Purpose \ Ledger \rightarrow Basic \ Settings \ \rightarrow Master \ Data \rightarrow Maintain \ Integrated \ Master \ Data$ 

Application: Entering Master Data for the fields (characteristics) in FI-SL (T830-tables):

Application menu:  $\rightarrow$  SAP R/3 System  $\rightarrow$ Accounting  $\rightarrow$  Financial accounting  $\rightarrow$  Special purpose ledger  $\rightarrow$  Environment  $\rightarrow$  Integr. Master data  $\rightarrow$  Create

# Direct (Adjustment) Postings in FI-SL

Application menu:  $\rightarrow$  SAP R/3 System  $\rightarrow$ Accounting  $\rightarrow$  Financial accounting  $\rightarrow$  Special purpose ledger  $\rightarrow$  Actual Posting  $\rightarrow$  Local documents (Global documents)  $\rightarrow$  Enter

## **Document Types and Number Ranges for FI-SL Transactions:**

IMG : → Financial Accounting → Special Purpose Ledger → Actual Posting → Maintain Valid Document Types

IMG:  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Actual Posting  $\rightarrow$  Number Ranges  $\rightarrow$  Maintain Local (Global) Number Ranges

#### **Versions:**

 $IMG: \rightarrow Financial\ Accounting \rightarrow Special\ Purpose\ Ledger \rightarrow Actual\ Posting \rightarrow Maintain\ Actual\ Versions$ 

IMG: → Financial Accounting → Special Purpose Ledger → Planning → Maintain Plan Versions

## **User Table:**

IMG: → Financial Accounting → Special Purpose Ledger → Basic Settings → Master Data → Maintain User Tables: Create User table and Define fields for User table

# **Document Display**

Application menu:  $\rightarrow$  SAP R/3 System  $\rightarrow$ Accounting  $\rightarrow$  Financial accounting  $\rightarrow$  Special purpose ledger  $\rightarrow$  Actual Posting  $\rightarrow$  Local documents (Global documents)  $\rightarrow$  Display

# 8. Summary Record Display

Application menu:  $\rightarrow$  SAP R/3 System  $\rightarrow$ Accounting  $\rightarrow$  Financial accounting  $\rightarrow$  Special purpose ledger  $\rightarrow$  Actual Posting  $\rightarrow$  Display totals

# 8. FI-SL Customizing Tools

Control Report: IMG :  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Display Control Report

Graphic Navigation: IMG :  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Use Graphic Navigation

Posting Test: IMG :  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Perform Diagnosis  $\rightarrow$  Posting Test

Posting Statistics: IMG :  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Perform Diagnosis  $\rightarrow$  Direct posting stat.

Troubleshooting: IMG :  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Perform Diagnosis  $\rightarrow$  Troubleshooting

Posting Statistics: IMG:  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Perform Diagnosis  $\rightarrow$  Direct posting stat.

 $\begin{tabular}{l} Ledger Comparison: IMG: $\rightarrow$ Financial Accounting $\rightarrow$ Special Purpose Ledger $\rightarrow$ Tools $\rightarrow$ Compare G/L Transaction Figure Ledger with FI-SL Ledger $\rightarrow$ Compare G/L Transaction Figure Fi$ 

Alternative to IMG for the above, from FI-SL Application Menu :  $\rightarrow Tools \rightarrow Diagnosis$ 

# Unit – Validations, Substitutions and Rules

#### Validation Maintenance:

 $IMG: \rightarrow Financial\ Accounting \rightarrow Special\ Purpose\ Ledger \rightarrow Tools \rightarrow Maintain\ Validation/Substitution/Rules \rightarrow Maintain\ Validation$ 

( Optional Simulation:  $\rightarrow$  Validation Initial Screen  $\rightarrow$  Simulate)

(Optional Trace Functionality:  $\rightarrow$  Validation Steps Entry Screen  $\rightarrow$  Extras: Switch on/off trace)

#### 2. Substitution Maintenance:

 $IMG: \rightarrow Financial\ Accounting \rightarrow Special\ Purpose\ Ledger \rightarrow Tools \rightarrow Maintain\ Validation/Substitution/Rules \rightarrow Maintain\ Substitution$ 

( Optional Simulation: → Substitution Initial Screen → Simulate)

(Optional Trace Functionality: → Substitution Steps Entry Screen → Extras: Switch on/off trace)

#### 3. Rule Maintenance:

IMG : Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Maintain Validation/Substitution/Rules  $\rightarrow$  Maintain Logical Rules

#### **User Exits**

IMG:  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Basic Settings  $\rightarrow$  User-Exits  $\rightarrow$  Maintain Client Dependent User-Exits: Enter user exit form pool for application area: GBLS

#### 3. Activation Validation / Substitution

# IMG : → Financial Accounting → Special Purpose Ledger → Basic Settings → Validation → Maintain Local (Global) Validation

 $IMG: \rightarrow Financial \ Accounting \rightarrow Special \ Purpose \ Ledger \rightarrow \ Basic \ Settings \rightarrow Substitution \rightarrow Maintain \ Local \ (Global) \ Substitution$ 

#### Unit – Sets and Variables

#### 1. Set Definition

IMG:  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Set Maintenance  $\rightarrow$  Maintain Sets Alternative from FI-SL Application menu  $\rightarrow$  Tools  $\rightarrow$  Set Maintenance  $\rightarrow$  Sets

#### 2. Set Utilities

IMG :  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Set Maintenance  $\rightarrow$  Sets  $\rightarrow$  (Create, Change Display)  $\rightarrow$  Utilities

*Alternative from FI-SL Application menu*  $\rightarrow$  *Tools*  $\rightarrow$  *Set Maintenance*  $\rightarrow$  Utilities:

- Set directory
- Find values in sets
- Set usage
- Graphics
- Transport
- Non-used sets
- Ambiguity check

#### **Variables**

 $IMG: \rightarrow Financial\ Accounting \rightarrow Special\ Purpose\ Ledger \rightarrow Tools \rightarrow Set\ Maintenance \rightarrow Maintain\ Variables$ 

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# 4. Variable Utilities

IMG:  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Set Maintenance  $\rightarrow$  Variables  $\rightarrow$  (Create, Change, Display)  $\rightarrow$  Utilities

Alternative from FI-SL Application menu  $\rightarrow$  Tools  $\rightarrow$  Set Maintenance  $\rightarrow$  Variables  $\rightarrow$  Utilities:

- Variables directory
- Non-used variables
- Transport

# **Unit – Report Painter**

# **Library Definition:**

FI-SL Application menu:  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Report Painter  $\rightarrow$  Report Writer  $\rightarrow$  Library  $\rightarrow$  Create (Change..)

# **Report Definition:**

FI-SL Application menu:  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Tools  $\rightarrow$  Report Painter  $\rightarrow$  Report  $\rightarrow$  Create (Change...)

# 3. Attaching a Report to a Report Group

Alternative one from within the Report Painter definition:  $\rightarrow$  Environment  $\rightarrow$  Assign report group Alternative two: FI-SL Application:  $\rightarrow$  Tools  $\rightarrow$  Report Painter  $\rightarrow$  Report Writer  $\rightarrow$  Report Group  $\rightarrow$  Create (Change..).

# **Executing a Report Group**

Alternative one from within the Report Painter definition:  $\rightarrow$  Report  $\rightarrow$  Execute

Alternative two: FI-SL Application:  $\rightarrow$  Tools  $\rightarrow$  Report Painter  $\rightarrow$  Report Writer  $\rightarrow$  Report Group  $\rightarrow$  Execute

# **Unit- Planning**

## 1.Plan Versions

 $IMG: \rightarrow Financial\ Accounting \rightarrow Special\ Purpose\ Ledger \rightarrow\ Planning \rightarrow Maintain\ Plan\ Versions$ 

## **Version Parameters**

 $IMG: \rightarrow Financial \ Accounting \rightarrow Special \ Purpose \ Ledger \rightarrow Planning \rightarrow Version \ Parameters \rightarrow Maintain \ Local(Global) \ Version \ Parameters$ 

## **Plan Periods**

IMG :  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Planning  $\rightarrow$  Plan Periods  $\rightarrow$  Maintain Local (Global) Plan Periods

# **Distribution Keys**

 $IMG: \rightarrow Financial Accounting \rightarrow Special Purpose Ledger \rightarrow Planning \rightarrow Maintain Distribution Keys$ 

# 5. Exchange Rates

 $IMG: \rightarrow Global Settings \rightarrow Currencies$ 

- → Check exchange rate type
- → Maintain exchange rate spread
- → Define translation ratios for currency translation
- → Enter exchange rates

# **Line Items**

 $IMG: \rightarrow Financial\ Accounting \rightarrow Special\ Purpose\ Ledger \rightarrow\ Planning \rightarrow\ Activate\ Line\ Items \rightarrow\ Activate\ Local\ (Global)\ Line\ Items$ 

# **Planning Parameters**

 $IMG: \rightarrow Financial\ Accounting\ \rightarrow Special\ Purpose\ Ledger\ \rightarrow\ Planning\ \rightarrow\ Maintain\ Planning\ Parameters$ 

#### **Plan Entries**

FI-SL Application menu: → Planning → Local (Global) planned values → Enter/Display

# **Plan Totals Display**

FI-SL Application menu:  $\rightarrow$  Planning  $\rightarrow$  Display Totals

# **Plan Documents Display**

FI-SL Application menu:  $\rightarrow$  Planning  $\rightarrow$  Display Plan documents

# Copy Data to Plan

FI-SL Application menu: → Planning → Copy data to plan (Local/Global)

#### **Unit – Allocations**

# Availability of new field for allocations:

 $IMG: \rightarrow Financial\ Accounting \rightarrow Special\ Purpose\ Ledger \rightarrow Periodic\ Processing\ \rightarrow Allocation \rightarrow Maintain\ Field\ Usage\ for\ Assessment/Distribution$ 

# 2. Sender/Receiver Relationship

 $IMG: \rightarrow Financial\ Accounting \rightarrow Special\ Purpose\ Ledger \rightarrow Periodic\ Processing\ \rightarrow Allocation \rightarrow Maintain\ Sender/Receiver\ Relationship$ 

# 3. Check Allocation Settings

 $IMG: \rightarrow Financial \ Accounting \rightarrow Special \ Purpose \ Ledger \rightarrow Periodic \ Processing \ \rightarrow Allocation \rightarrow Check \ Allocation \ Settings$ 

# **Allocation Cycle Definition**

FI-SL Application menu:  $\rightarrow$  Periodic Processing  $\rightarrow$  Allocation  $\rightarrow$  Actual/Planned assessment (Actual/Planned distribution)  $\rightarrow$  Create (Change..)

# 5. Allocation Cycle Execution

FI-SL Application menu:  $\rightarrow$  Periodic Processing  $\rightarrow$  Allocation  $\rightarrow$  Actual/Planned assessment (Actual/Planned distribution)  $\rightarrow$  Execute

# 6- Display Allocated Totals

FI-SL Application menu:  $\rightarrow$  Actual Posting  $\rightarrow$  Display totals (record type 2 or 3)

# Unit - Rollups

#### **Field Movements:**

IMG :  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Periodic Processing  $\rightarrow$  Rollup  $\rightarrow$  Maintain Field Movements

# **Substitution Activity:**

IMG:  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Periodic Processing  $\rightarrow$  Rollup  $\rightarrow$  Maintain Substitution

# **Rollup Definition:**

FI-SL Application menu:  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Periodic Processing  $\rightarrow$  Rollup  $\rightarrow$  Create (Change..)

## **Rollup Execution:**

FI-SL Application menu: → Financial Accounting → Special Purpose Ledger → Periodic Processing → Rollup → Execute

## **Rollup Reverse:**

FI-SL Application menu:  $\rightarrow$  Financial Accounting  $\rightarrow$  Special Purpose Ledger  $\rightarrow$  Periodic Processing  $\rightarrow$  Rollup  $\rightarrow$  Reverse

#### **GLOSSARY:**

**Activity**: Each SAP application or external system, which sends data to the Integration Manager, transfers the data into the FI-SL System with a corresponding activity. An activity classifies each source of data sent to the Integration Manager and groups together data that is to be processed the same way.

With Release 3.0, common activities are grouped together (for example, all MM activities), so that it is no longer necessary for you to assign a specific activity to a ledger. You simply assign the activity group code to a ledger, and the system automatically assigns the relevant activities.

Actual Posting: Data can enter the FI-SL System via three different mediums:

- from other SAP Systems, such as FI, MM, CO, and SD
- directly, using FI-SL's document entry function (for example, when posting correction documents)
- from external systems (for non-FI-SL data)

**Allocation**: FI-SL's allocation package allows you to allocate different amounts from one source to many other sources, depending on your individual needs.

The two main types of allocations are:

- •assessments: With an assessment allocation, you can accumulate amounts or quantities for all accounts of the sending object and summarize them into an assessment account; the system only debits and credits the assessment account.
- ·distributions: With a distribution allocation, you can allocate the original balance(s) from the sender(s) to the receivers.

You can allocate both plan and actual data using assessment and distribution allocation types.

With allocations, you can allocate:

fixed amounts: specific fixed amounts are allocated to each receiving unit, independent of the amount in the sending unit.

fixed percentages: specific fixed percentages are allocated to each receiving unit, based on the amount or quantity allocated by the sending unit.

dynamic allocations: a percentage amount is allocated to each receiving unit, based on a percentage of the amount in the receiving unit's original database records.

You can allocate to specific values, and/or you can use sets to allocate amounts. Sets are easy to create and maintain, so you have more flexibility when maintaining allocations on your system.

Allocations are stored as separate records on the database. Therefore, you can view actual or planned data, with or without the allocated values. When you are viewing a receiver, you can also determine which senders have allocated the values.

**Archiving:** With the Archiving function, you can transfer data from an existing database table to a sequential file (for example, UNIX file). You also have the option of deleting the data from your database when you archive the data

Average Balance Ledger: With Release 3.0, you can also create an average balance ledger, based on the summary data stored in a special purpose ledger. The average balance ledger automatically inherits the attributes (such as the fiscal year variant, the assigned table, and so on) of the special purpose ledger to which it is assigned. You can only use this ledger when creating reports using the average balance ledger or displaying summary records from the ledger. It is also possible to create a user exit for posting to this ledger, in the case where the posting date should not be used to determine the average balance.

**Balance Carry Forward**: You use the Balance carry forward function to carry forward the balances of accounts from the previous fiscal year to the beginning balance of the new fiscal year. You can carry forward:

- balance sheet account balances from the previous fiscal year to the beginning balance of the new year
- the profit and loss account balance from the previous fiscal year to the retained earnings account of the new year

**Companies**: You can use local companies and global companies in your FI-SL system. Local companies are defined in the FI System and are the most commonly used companies in the FI-SL System. You can set up your system so that a local company directly updates a local ledger (ledger/local company assignment). Global companies usually group together one or more local companies. You can assign a local company to a global company so that the local company updates a global ledger (ledger/global company assignment) and a local ledger.

#### **Control Report Tool**

You use the control report tool when you want to display and/or print the contents of the FI-SL direct posting tables (ATAB tables). The FI-SL direct posting tables are defined using the Customizing function and determine how documents are posted into the FI-SL System

Currencies: Currencies that should be posted to the special purpose ledger

It is possible to store three currency amounts simultaneously in an FI-SL database:

- transaction currency: This is the currency in which the business transaction was originally entered into the FI-SL System.
- second currency: This is the currency that you want to store in your ledger in addition to the transaction currency (previously known as the local currency).
- third currency: This is the currency that you want to store in your ledger in addition to the transaction currency and the second currency (previously known as the group currency).

You can assign different combinations of currency types to your special purpose ledger. When you define the ledger, the system will prompt you with the possible currency combinations. When you install your system databases, the system also prompts you to enter currency information for posting data, for example, if a ledger should be posted to using the item currency or transaction currency (for FI).

**Data Set Entry**: Basic key figures define which value fields are displayed in a report (for example, transaction currency, local currency, group currency and quantity). You can combine a basic key figure with one or more additional characteristics entered in a set to create a data set entry. The set determines additional selection conditions, such as the record type (actual or plan data) and the plan version. You enter data set entries directly in data sets.

In Report Painter, a data set entry is known as a predefined column because each data set entry usually represents a report column.

**Data Transfer**: The FI-SL System provides you with the following programs for transferring non-FI-SL data into the FI-SL System:

RGUREC00: With this program, you can load data from an external source (non-SAP R/3 System) to the FI-SL System. RGUREC00 is only an example program and should be copied and modified according to your needs when you process postings.

If you changed the standard coding block delivered with your FI-SL System, you will need to change the RGUREC00 program so that it reflects new dimensions that you have defined.

For information about loading data from external sources with RGUREC00, you should contact an SAP consultant.

RGUREC10: With this program, you can transfer data from the FI System into the FI-SL System. When you begin the transfer program, you can select the specific data that you want to transfer into the FI-SL System.

RGUREC20: With this program, you can transfer actual data from the CO System into the FI-SL System. When you begin the transfer program, you can select the specific data that you want to transfer into the FI-SL System.

RGUREC30: With this program, you can transfer actual data from Materials Management (MM) into the FI-SL System. When you begin the transfer program, you can select the specific data that you want to transfer into the FI-SL System.

RKEPCU40: With this program, you can transfer actual data from Sales and Distribution (SD) into the FI-SL System. When you begin the transfer program, you can select the specific data that you want to transfer into the FI-SL System.

RGUREC40: With this program, you can transfer the opening balance of CO statistical key figures into the FI-SL System. When you begin the program, you can specify the selection criteria for transferring the statistical key figures into the FI-SL System.

These programs should not be started in dialog when other users are posting.

#### **Diagnosis Tool**

You use the diagnosis tool when you want to test your system setup and determine how and where a document will post or has posted to the FI-SL System. You can then determine why a specific document is not posting to a ledger.

**Document and Summary Record Display**: In the FI-SL System, you can display:

document data: You can display document lines stored in the FI-SL line item databases and in the line item databases of the source databases.

summary record data: You can display selected summary records from the FI-SL summary databases by specifying key dimension values.

**Field grouping code**:the dimensions that can be used in a special purpose ledger, are determined by the field grouping code assigned to the ledger. The field grouping code contains the dimensions that are taken over from the source database table into the FI-SL database table.

The **FI-SL System** is designed to provide summary information from multiple applications at a level of detail that you define. By using the variety of modules provided by FI-SL, you can collect, combine, summarize, modify and allocate actual and plan data that originates from other SAP and external systems.

Formulas: Within a set, you can use formulas to perform calculations.

#### Example:

You can use a formula in a set and instruct the system to subtract a set line from another set line so that the system calculates a variance column in a report.

You can use formulas in any basic set or data set; you cannot use formulas in a single-dimension or multidimension set.

#### **Global Company Code:**

Your company is a tax entity and is different from the legal company, and you also want to store more detailed information for the tax entity as for the legal company. You would then define the legal company (company code) in your system that would post to the tax entity (global company code). It is also possible for additional information to post to the tax entity.

You can also use a global company code when you want to eliminate generated revenue for a partner company.

#### **Global Ledgers**

You can use global ledgers to store data posted for:

- Global company codes, and/or
- Local company codes that are assigned to global company codes.

**Graphic navigation function**, allows you to graphically display relationships between companies, ledgers, and activities. Using this function, you can also branch into the respective configuration settings and change them as required.

**Indices**: In addition to the primary key, which you define in the ABAP/4 Dictionary when creating a table, you can also define additional indices (called database indices) for transparent tables. Using indices, you can improve the time needed to access and read your database table.

# Example:

You can define one index that is structured by Account, Cost Center, and Business Area. You can define another index that is structured by Cost Center, Account, and Plant.

The structure of your indices is determined by the table dimensions that you access most often.

FI-SL's **Integration Manager** receives and processes all data that enters the FI-SL System. The Integration Manager validates, and substitutes, and then summarizes data according to user-defined conditions.

**Ledger**: Each ledger uses several dimensions that define a sub-set of the coding block of an object table. You can define your system so that you have one ledger for each database table structure, and/or more than one ledger per table structure. After you have defined the maximum coding block in the ABAP/4 Dictionary, you define which dimensions will be used by each ledger.

**Ledger Selection**: The FI-SL ledger selection facilities allow you to define the exact conditions under which a ledger will be selected for posting. The FI-SL Integration Manager uses these ledger selection conditions to determine which special purpose ledgers should be selected for posting.

Each business transaction is posted to the FI-SL databases according to user-defined rules.

You may define a special purpose ledger to be selected for posting when:

- a particular group of accounts are part of the business transaction
- a particular group of products are involved in a business transaction
- a particular group of transaction types are posted

Ledger selection conditions can be simple or complex. Any field value or field value combinations contained in the business transaction can be used as part of the rule - except for amounts or quantities.

#### **Ledger Statistics Tool**

You use this tool to display the number of records that have posted for a ledger, as well as the database tables to which records have been posted.

**Line Item database**: Normally, most of the business transactions affecting the FI-SL System will come from other SAP R/3 Systems (for example, transactions for material purchases or customer invoicing). Documents are stored in the source application database where the documents are entered. You can also store these documents, along with the detailed transaction information, in an optional FI-SL line item database.

Examples of line item database table structures are delivered with your standard system: GLREFA (for actual data/local ledgers), and GLREFP (for plan data/local ledgers). These tables are only examples and must be copied for use in your system.

Local Company Code: A company code is normally defined as a balanced set of legal books

You can set up your system so that a local company code directly updates a local ledger, or you can assign a local company code to a global company code so that the local company code updates a global ledger.

## **Local Ledgers**

You can use local ledgers to store data posted for local company codes.

**Master Files**: For each dimension in the database table, you can define master files in the ABAP/4 Data Dictionary. Master files can contain data for each dimension that is used in a database.

The FI-SL System uses master files to:

- validate a dimension used within the FI-SL System
- provide text for the Report Writer

- check values entered with direct input
- search for valid combinations from an interval of values

**Object numbers** determine how the summary and line item database tables will be accessed via the object tables. The object number (receiver - ROBJNR) points to the variable dimensions defined in object table 1; the partner number (sender - SOBJNR) also points to the variable dimensions defined in object table 1. The transaction attributes number (COBJNR) points to the variable dimensions defined in object table 2.

variable dimensions. The variable dimensions that can be used in the summary database table are determined by the dimensions defined in object tables 1 and 2.

If the dimension was defined in object table 1:

The variable dimension can be an object (receiver) dimension, such as RCNTR, and/or a partner (sender) dimension, such as SCNTR; the dimension can be up to 10 characters long, of which up to the last nine characters must be defined in object table 1.

Client, ledger, record type, version, fiscal year, object numbers (object/partner/transaction attribute), currency key, quantity unit, debit/credit indicator, and maximum period

**Object tables**: SAP delivers two types of object tables:

Object/Partner (Receiver/Sender): This object table supports 15 variable dimensions, including the local company code/global company. Two of the variable dimensions are used for internal purposes, leaving 13-14 variable dimensions available for customer definition. The variable dimensions defined in this object table have a sender/receiver relationship (for example, receiver account (RACCT) and sender account (SACCT)). The object/partner table (object table 1) contains:

- fixed dimensions. You cannot change fixed dimensions.
- variable dimensions. The variable dimensions are the key dimensions of the coding block. These dimensions are defined in object table 1 and can be used in the summary and line item database tables as object dimensions (receivers) and/or partner dimensions (senders). Object and partner dimensions have a direct relationship, where partner dimensions are the senders of data, and object dimensions are the receivers of data.
- Example:
- Account (ACCT), cost center (CNTR).

An example of an object/partner object table delivered with FI-SL is GLREFO (only for local ledgers).

#### **Report Groups:**

Once you have created a report, you define a report group for the report(s). A report group can contain one or more reports. When reports use the same characteristics and share the same data, data is selected faster and processing time is quicker, since report data is only selected once for all reports within a report group.

The process of defining and executing a report group can be completed in four steps:

- 1. Creating a report group: You define the reports that are in a report group. Reports in a report group are always from the same library. You can also change the texts that appear on the selection screens when the report group is processed.
- 2. Generating a report group: You generate the report group. The report group has been generated successfully if there are no errors in the report group.

- 3. Selecting data for the report group: The system selects the data that will appear in the reports defined in the report group.
- 4. Displaying and printing reports in a report group: The system edits the data that has been selected for the report group and presents the report group's reports in the desired output media requested (online, printer, spool file, or external file).

If you are running a report that has been changed, you only need to regenerate the report group, and select and display report data; you do not need to redefine the report group.

The **Report Painter** performs a similar task to that of the Report Writer, but is simpler to use. Many of the Report Writer functions are available in the Report Painter, but you do not need to be familiar with Report Writer concepts, such as sets, to be able to use the Report Painter.

The Report Painter uses a graphical report structure that forms the basis for your report definition and displays the rows and columns as they will appear in the report output.

The **Report Writer** is designed to provide you with summary information from multiple applications. The Report Writer selects the data you request and then presents it in the format you define. Using FI-SL functions such as sets, variables, and formulas, you can create a report that meets your specific needs.

**Rollup**: When you create a report in the FI-SL System, the Report Writer reads the ledgers that contain the data for your report. If the ledgers contain extensive records, system performance is slower. To improve system performance, you can create a rollup ledger that contains summarized and condensed data from one or more ledgers.

A rollup ledger is the summarization of the information from one or more ledgers (source ledgers) into a single ledger. Each record in the rollup ledger is a summary of the records in other ledgers.

A **rule** is a Boolean expression that you can use as a condition or check or in another rule. Rules allow you to refer to frequently used Boolean expressions by using the rule name.

FI-SL's Integration Manager uses Boolean Logic to:

- validate data
- substitute data
- select ledgers for posting
- transfer substitution data to a rollup ledger
- select report data

The Rule Manager stores the Boolean rules used to analyze data. The Integration Manager calls the Rule Manager when determining if entered data should be used. If a Boolean Logic statement is true, an action is taken; if a statement is false, no action is taken.

**Sets:** Sets are used throughout the FI-SL System as the building blocks for many of the FI-SL modules. In FI-SL, you use sets to group together data and to define data hierarchies. Under a set name, you can store specific values or ranges of values. These values exist within one dimension.

A set links together specific values or ranges of values under a set name. These values exist within one or more dimensions of the FI-SL coding block. A dimension is a single field or column of a logical database (table). Account, cost center, and business area are examples of dimensions

In FI-SL, you use four types of sets:

basic sets: Basic sets contain specific values, such as account and cost center numbers.

data sets: Data sets contain specific key figures (such as transaction and local currency). You can combine a basic key figure with one or more additional dimensions to create your own data set entries.

·single-dimension sets: Single-dimension sets are used to create set hierarchies by combining basic sets and other single-dimension sets that use the same dimension.

multi-dimension sets: Multi-dimension sets are used to create set hierarchies with sets that use different dimensions.

You can use sets and set values in other FI-SL system components, such as:

- Boolean Logic formulas
- Report Writer
- Allocations
- Planning
- Rollups
- Currency translation

#### Set and Variable Utilities

You can use the set and variable utilities to obtain additional information about a set or variable (for example, to check set and variable usage and to transport sets and variables).

Displaying a Set Directory

Displaying a Variable Directory

Checking Field and Set Value Usage

Checking Set Usage

Graphically Displaying Set Structure

Maintaining a Set Hierarchy

Transporting Sets

Transporting Variables

Displaying and Deleting Non-Used Sets

Displaying and Deleting Non-Used Variables

Checking for Overlapping Values

**Special purpose ledgers** are user-defined ledgers designed to meet your specific business requirements according to the dimensions you specify. Special purpose ledgers are the only types of ledger you can create within the FI-SL System.

**Standard Layouts**: For each report that you create, you assign a standard layout. This standard layout determines the layout features of the report, such as the length of a row title, and the page and numeric format of data in the report. The system assigns a default standard layout, called SAP, to each report; you receive the SAP standard layout with each R/3 System.

When you define a report, you can:

- accept the SAP standard layout for the report,
- assign a different standard layout to the report, or
- revise the report parameters so that the parameters are specific to the report.

Standard ledgers are configured and delivered by SAP and are controlled within the individual applications.

Standard ledgers are delivered in the following SAP applications:

- General Ledger Accounting (FI-GL)
- Consolidation (FI-LC)
- Profit Center Accounting (CO-PCA)
- Reconciliation Ledger (CO-OM-CEL)

**Substitutions**: Substitution rules are stored in the Rule Manager; as data is being entered, the data is substituted by the Integration Manager, which calls the Rule Manager when it substitutes the data. Substitution occurs before the data is posted to the FI-SL databases.

You define substitution rules using Boolean Logic. When you define a substitution rule, the system checks the substitution rule to ensure that it is syntactically correct.

**Table Group**: A table group is a group of interdependent database tables (object/summary/actual and plan line item tables).

#### Tracing validations/substitutions/rules:

Using the Extras Switch on trace function, you activate a tracing function that allows you to test a validation/substitution/rule definition during the posting process. While posting a document, the system will call the validation/substitution/rule and display the rule contents, as well as how the data is used for validation or substitution. This function allows you to diagnose possible errors in the validation/substitution/rule definition.

You can only trace one validation at a time, but one substitution and one rule can also be active simultaneously; this is also true when you are tracing a substitution or rule. The tracing function is only activated for the user who has turned on the trace function.

To trace a validation/substitution/rule:

- 1. Display the validations/substitution/rule that you want to trace.
- 2. Select Extras ® Switch on trace.

You cannot use the Switch on trace function for matrix validations and substitutions.

3. In a separate session, call the posting transaction that you want to trace.

When the validation/substitution/rule is called, the system will display the result of the validation/substitution/rule that is used within the posting transaction.

4. To turn off the tracing function, select Extras ® Switch off trace.

**Transaction Attributes**: This object table supports 15 variable dimensions. The variable dimensions defined in this object table are transaction attribute-dependent and do not have a sender/receiver relationship (for example, controlling area (KOKRS)). The optional transaction attributes table (object table 2) contains:

fixed dimensions. You cannot change fixed dimensions.

Examole: Client, object number for the transaction attribute dimensions

Object numbers determine how the summary and line item database tables will be accessed via the object tables. The object number for the transaction attribute dimensions are defined in object table 2.

- variable dimensions. These variable dimensions do not have a direct sender/receiver relationship; instead, the variable dimensions are transaction attribute-dependent.

Example variable dimensions in object table 2 include controlling area, movement type, and activity.

An example of a transaction attribute object table delivered with FI-SL is GLREFC (only for local ledgers).

**User-Exits**: Within field movements, you can also enter user exits. In previous releases, user exits for field movements were stored in the following programs:

RGIFU000, for user exits in fixed field movements (such as, Currency)

RGIVUxxx (xxx = client), for user exits in user-defined field movements (such as Account and Cost Center)

Beginning with Release 3.0, you can define your own user exit programs. If you create a user exit program, this program name must be defined in the table for client-dependent user exits (table T80D) in Customizing. (For more information, see the Maintain Client-Dependent User Exits step in the FI-SL Implementation Guide (IMG).) If you do not change table T80D, the exit programs RGIFU000 and RGIVUxxx are used.

**User tables**: When you create or maintain a set and you do not enter a dimension in the Field name field when you create the set, a list of all dimensions in the specified table appears in a dialog box. (You enter a table name for the set on the Create Set: Initial Screen. You then choose a dimension for your set.)

If you do not use most of the fields in a table, you can create a table subset. This table subset, which you name and define, contains only the fields that you need for the set.

Beginning with Release 3.0D, you create table subsets using view maintenance in Customizing. You no longer need to use the Table maintenance transaction to create your own user tables.

For information about creating table subsets, call up the Maintain User Tables step in the FI-SL Implementation Guide (IMG).

Once you have created the table subset, you can use the table name when you create a set. When you create a set and enter the new table subset name in the Table field on the Create Set: Initial Screen, the dialog box only displays the fields from your subset table.

**Validations:** With validations, you can check values and combinations of values as they are being entered in the R/3 environment. Validation rules are stored in the Rule Manager; as data is being entered, the Integration

Manager validates the data against the validation rules stored in the Rule Manager. Because validation occurs before data is posted, only valid information enters the FI-SL System.

You define validation rules using Boolean Logic. When you define a validation rule, the system checks the validation rule to ensure that it is syntactically correct.

A **variable** is a placeholder for data to be specified when you run a report that uses the variable. For example, a variable could be a company, the current year, the current month, a date, or a user name.

You can create three types of variables:

· Value variables: This variable represents a specific value that you can enter directly. You can only use value variables in basic sets.

Formula variables: This variable represents a formula, which determines a value for the variable. You can only use formula variables in basic sets.

Set variables: This variable represents a defined set and the values contained in the set. You can use set variables in multi-dimension sets to be used in the row definition of your report or directly in the general selection of a report definition

**Versions**: Within a special purpose ledger, you can store different versions of data. You can also store a specific record type per version.

A record type can be one of the following:

- actual data
- plan data
- actual allocation data
- planned allocation data

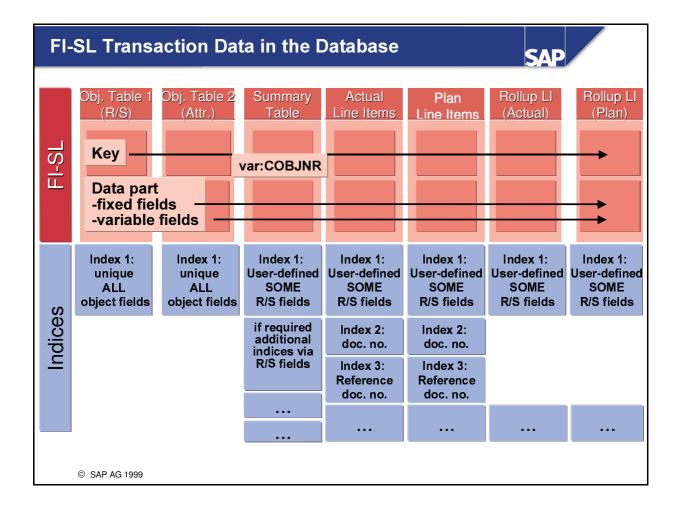
You define a version by record type and version number.

# **Table Group and other Technicalities**

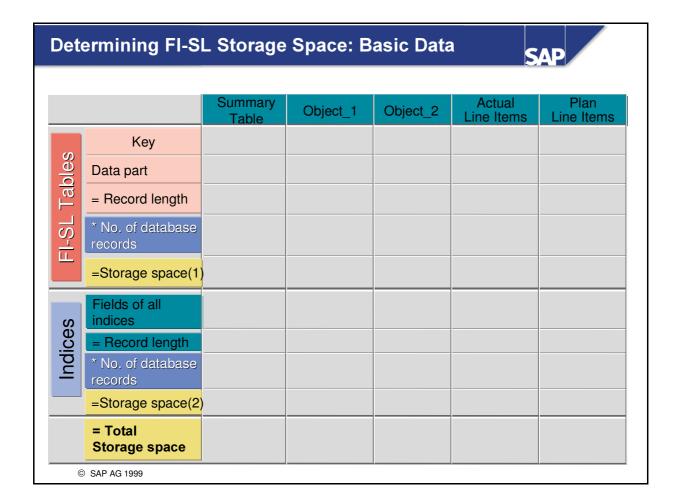


- FI-SL Transaction Data in the Database
- Determining FI-SL Storage Space: Basic Data
- Update: ONLINE or in the BACKGROUND?
- Summary Table: Structure
- Object Table 1 and 2
- Line Item Tables (Actual, Plan, Rollup)
- Code Combinations
- Example Table Group GLFUNC
- List of Fields and Indices for each Table (Example GLFUNCT)
- Menu paths and Glossary of Terms

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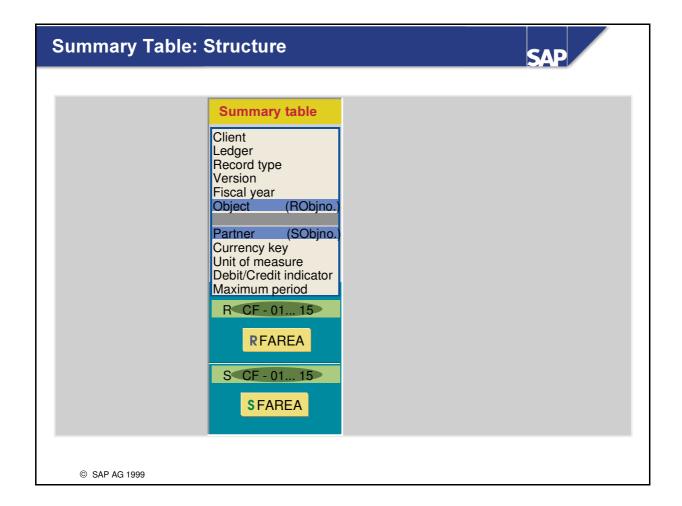
■ Transaction data in the FI-SL database.



■ Calculating the required storage space.

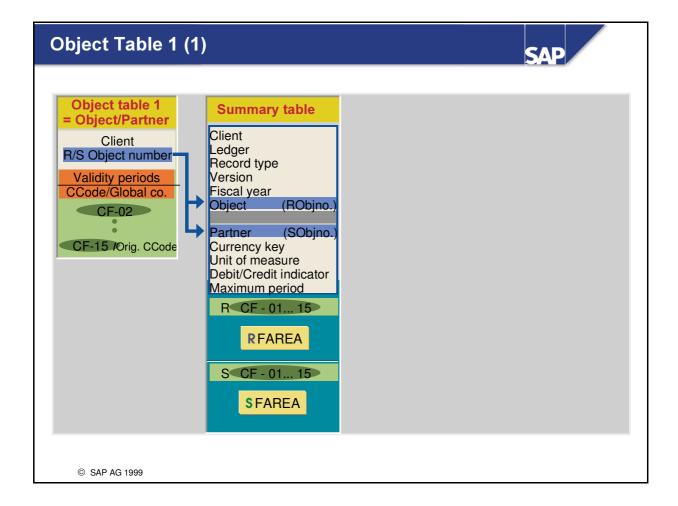
#### **Update: ONLINE or in the BACKGROUND??** Integration Interface Manual Periodic Actual data / Plan data Planning **Functions** Advantages of online: Usually Always in the background for Up-to-date data Online large volumes Data integrity (integration consistency) of data Increased system capacity or from Advantages of background: External (Scheduling a **Systems** background Limited system capacity (doj via System availability during the night? Batch Input © SAP AG 1999

- Whether you update data online or in the background, depends on different criteria:
  - The online mode can be used when
- you require up-to-date data and may need to quickly access data in order to correct any errors. You can also process your data online if this does not affect your system capacity.
- you usually enter planning values online.
  - The background processing mode is recommended when
- you have limited system capacity and also when the system is available overnight and there are no users working in the system.
- you use periodic functions that process large amounts of data (for example, allocation, rollups, and so on).

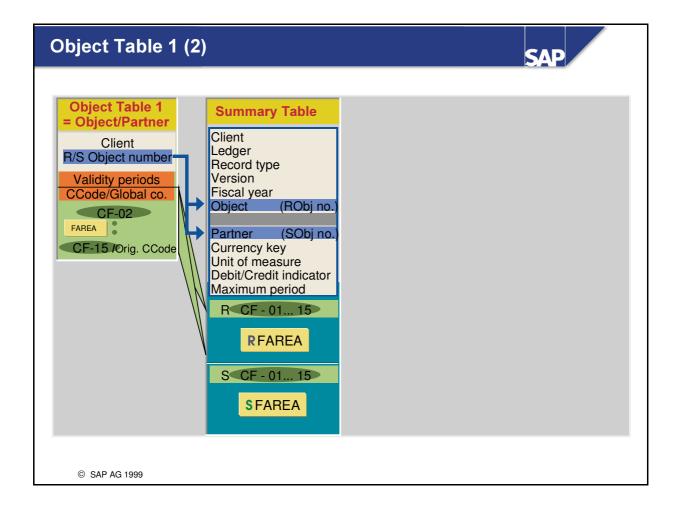


## ■ The summary table contains:

- fixed fields that you cannot change in the key part, for example, client, ledger, record type, version, fiscal year, currency key, etc.
- variable fields (characteristics) in the data part, for example, FAREA as the object (RFAREA) and FAREA as the partner (SFAREA).

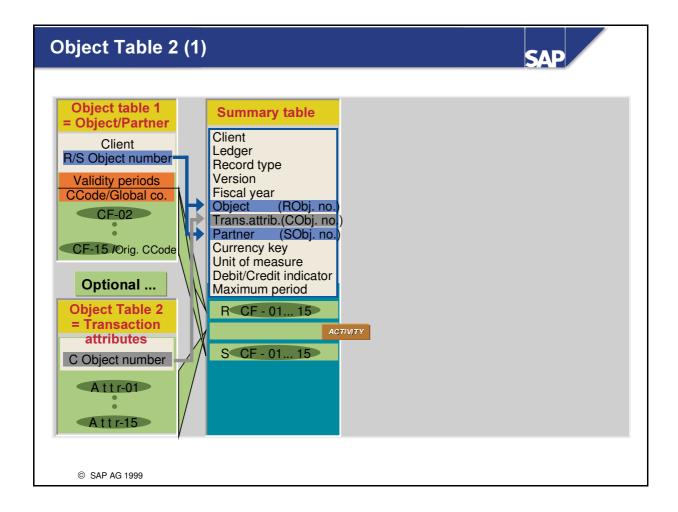


- An object number (RObjno.) and a partner number (SObjno.) are also fixed fields in the key part.
- These numbers refer to Object Table 1 which contains the combinations of account assignment characteristics.
- These characteristic combinations are encrypted in the object table with a consecutive object number. The key of the summary table stores this object number instead of the original characteristic.
- You can assign a validity period to each of these characteristic combinations. The combinations are then treated like master data which is validated when postings are made to the ledgers assigned to the table. (The error message "Invalid account assignment combination..." is displayed.) For more information on this function, please refer to the slides in this Unit under 'Code Combinations'.

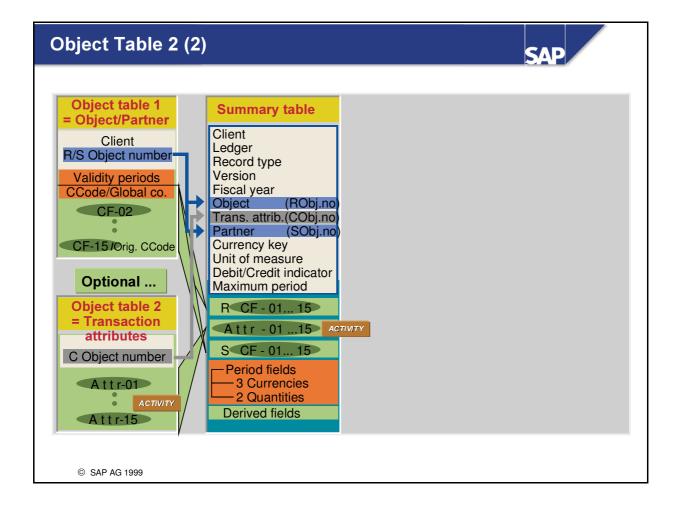


## ■ Example:

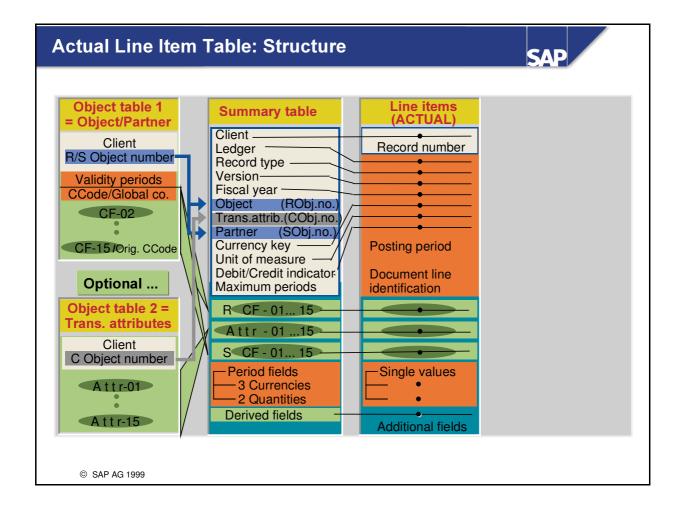
- Object table 1 contains the characteristic FAREA.
- The summary table contains one object characteristic RFAREA (receiver) and one partner characteristic SFAREA (sender).
- Storing a partner field (partner characteristic) is optional.
- Object characteristics (receiver) must begin with R and partner characteristics (sender) must begin with S.



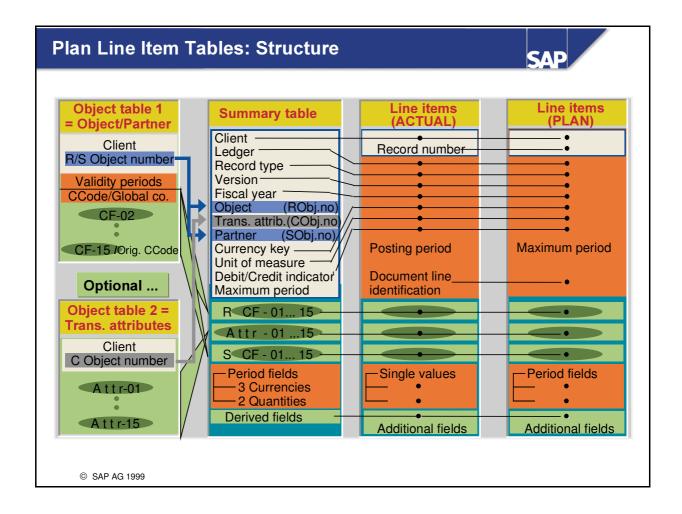
- You have the option of using Object Table 2 for these transaction attributes.
- The key part of the optional Object Table 2 contains the fixed characteristics that you cannot change (the client and the C Object number). This object number encrypts the variable characteristics in the data part. These are the transaction attributes.



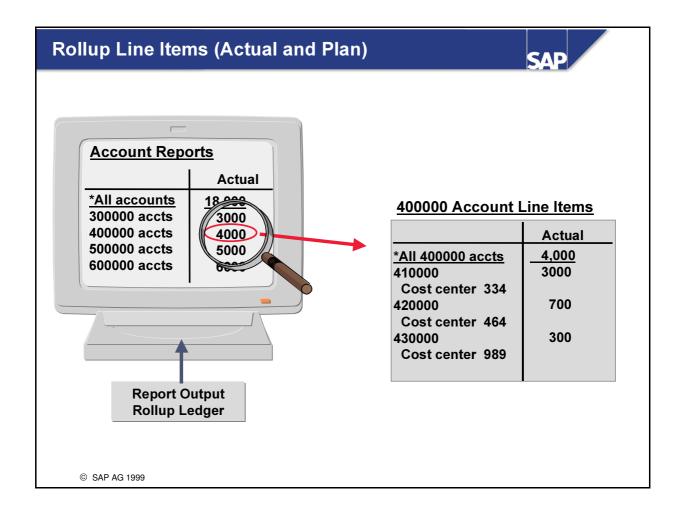
- The fields for storing the summary values (usually a block of 16 periods for the currency and quantity fields) come after the variable characteristics (R, C and S characteristics) in the summary table.
- At the end of the summary table, you can add additional characteristics which are derived directly from the characteristics. For example, the controlling area is derived directly from the company code. These fields are primarily used in reporting and cannot be used for use in other FI-SL functions such as planning and allocation.



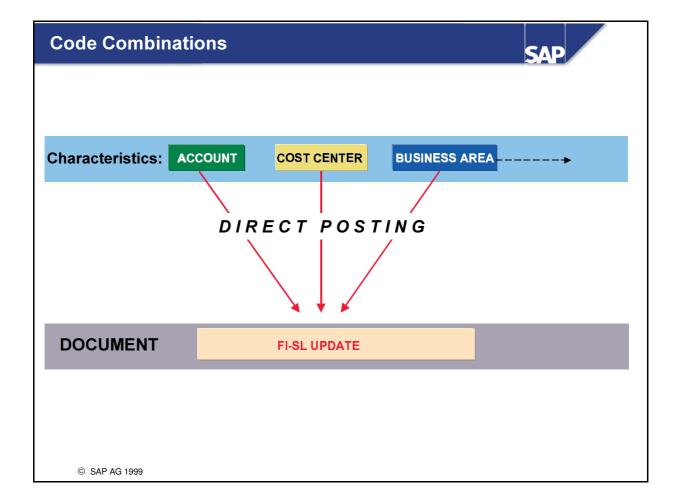
- The key part of the actual line item table contains the clients and a record number. This number is a consecutive number that is assigned automatically by the system when a record is written to the table.
- As in the summary table, the data part of the actual line item table contains the fixed characteristics. This is followed by the posting period and other document-related information, for example, the document number and document type, and finally the object and partner characteristics (as in the summary table).
- You can then include additional characteristics, for example a transaction code, to further specify a document. These characteristics are only output in the document display or in line item reporting.



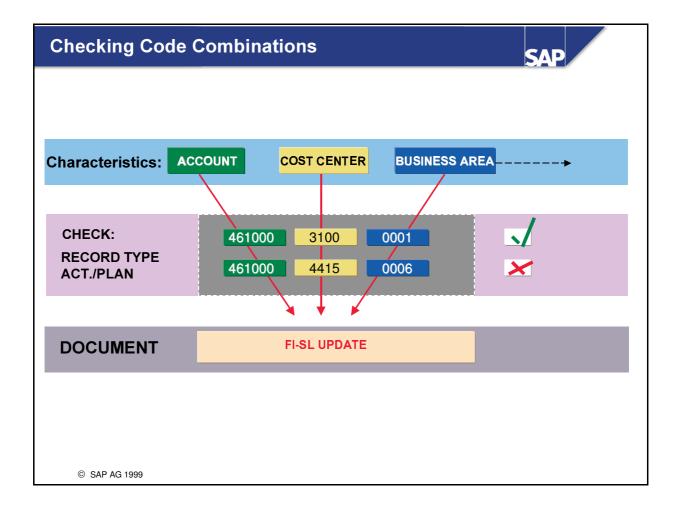
■ The fields in the plan line item table are the same as the fields in the actual line item table. However, the posting period is replaced with the maximum period. As in the summary table, this maximum period refers to the amount balances and quantity balances that are normally stored in a block of 16 periods.



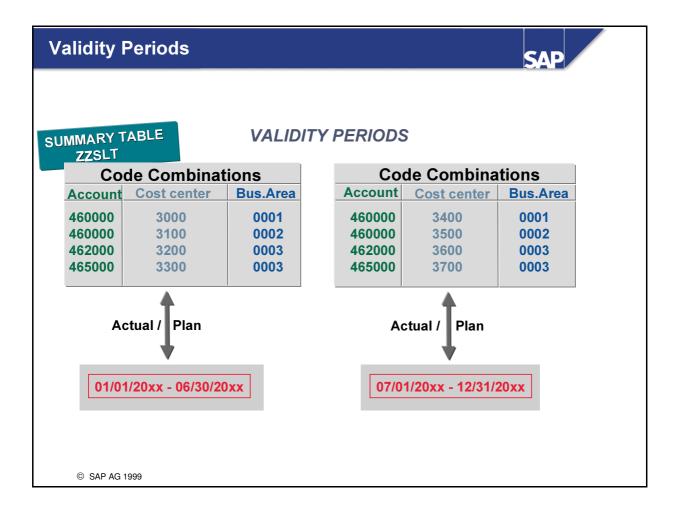
- If you display the summary records in your rollup ledger using the Report Writer and select a block of data, you can drill down to the line items of the relevant summary records.
- However, this is only possible when you have created and installed the corresponding rollup line item tables (actual / plan).
- It is not yet possible to automatically install these tables using the "Define table group" function.
- To do so, you should copy the standard example tables GLREFU (Rollup Actual Line Item Table) and GLREFV (Rollup Plan Line Item Table) and modify them according to your requirements.



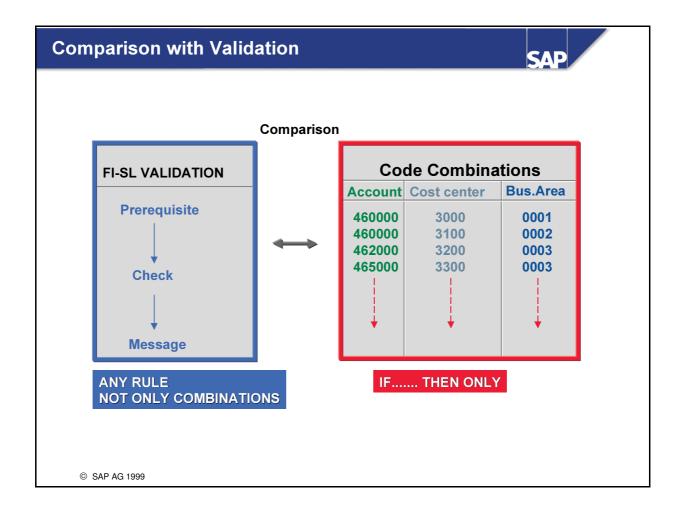
- When you create or post a document in the standard system, you can post to any characteristic combination, if the relevant master data has been maintained.
- For example, you can post to all existing accounts and cost centers.
- You may not want to take advantage of this flexibility. For organizational reasons it may be necessary to limit the number of characteristic combinations that can be posted to by a document.
- In that case, setting Code Combinations in FI-SL will have the result of blocking postings to the FI-SL ledgers which do not meet the valid combination of characteristics.



- It is often necessary to limit the characteristic combinations.
- Example: You can define that account 461000 can only be posted to with cost center 3100 and business area 0001.



- For these code combinations, you assign a validity period for the actual data and/or plan data.
- You activate code combinations at table level. The code combinations affect all ledgers that use this table.



- This functionality is similar to validation, but should not replace it.
- The validation function performs extremely complicated data checks using Boolean logic.
- When you maintain the code combinations and their validity periods for actual/plan, you can only use "If...then..." statements.