AC280

Analytics & Reporting in Financial Accounting

SAP Financials

Date _____

Training Center _____

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Education Website _____

Participant Handbook

Course Version: 92
Course Duration: 3 Day(s)
Material Number: 50093769

An SAP course - use it to learn, reference it for work

g200952925129

About This Handbook

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

Typographic Conventions

American English is the standard used in this handbook. The following typographic conventions are also used.

Type Style	Description
Example text	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths, and options. Also used for cross-references to other documentation both internal and external.
Example text	Emphasized words or phrases in body text, titles of graphics, and tables
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example SELECT and INCLUDE.
`Example text`	Screen output. This includes file and directory names and their paths, messages, names of variables and parameters, and passages of the source text of a program.
`Example text`	Exact user entry. These are words and characters that you enter in the system exactly as they appear in the documentation.
`<Example text>`	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.

Icons in Body Text

The following icons are used in this handbook.

Icon	Meaning
	For more information, tips, or background
	Note or further explanation of previous point
	Exception or caution
	Procedures
	Indicates that the item is displayed in the instructor's presentation.

Contents

Course Overview

When you are working in the SAP system, you display and evaluate information that is contained in the database. You export this data from the database and edit it using reports. In this course you will familiarize yourself with and execute these reports.

Target Audience

This course is intended for the following audiences:

- Project team
- IT employees who use the evaluation options in FI-GL, FI-AP, and FI-AR
- Consultants

Course Prerequisites

Required Knowledge

- AC010
- AC200
- Knowledge of Financial Accounting

Course Goals

This course will prepare you to:

- Use a number of reporting tools in addition to the standard reports that SAP provides. In this course, you will not only learn how to run these reports, you will also use them.

Course Objectives

After completing this course, you will be able to:

- Explain why reports are necessary
- Explain the significance of reporting tools
- Differentiate between:
- Standard reports provided by SAP, and
- Reports that you create yourself

Unit 1

Standard Reports in General Ledger Accounting, Accounts Receivable Accounting, and Accounts Payable Accounting

Unit Overview

Which standard reports are provided in the SAP system in General Ledger Accounting (FI-GL), Accounts Receivable Accounting (FI-AR), and Accounts Payable Accounting (FI-AP)? Where do users find these reports and how do they start them with their own selection criteria? How do they save these selection criteria? Users want to be able to display standard lists with minimum effort.

Unit Objectives

After completing this unit, you will be able to:

- Demonstrate where to find the reports required in General Ledger, Accounts Receivable, and Accounts Payable Accounting
- Explain the importance of information systems
- Execute reports
- Create report variants
- Use report variables

Unit Contents

Lesson: Information Systems

Lesson Overview

In this lesson, you will learn about the different selection criteria available to search for reports in General Ledger Accounting, Accounts Receivable Accounting, and Accounts Payable Accounting.

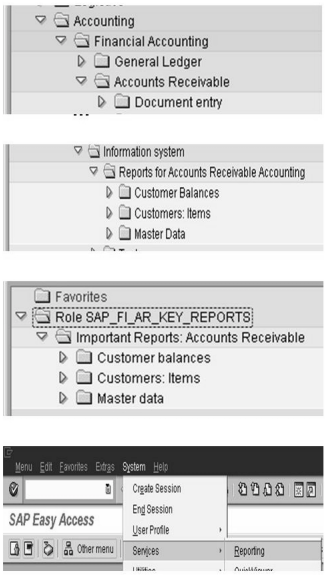
Lesson Objectives

After completing this lesson, you will be able to:

- Demonstrate where to find the reports required in General Ledger, Accounts Receivable, and Accounts Payable Accounting
- Explain the importance of information systems
- Execute reports

Business Example

Employees in General Ledger Accounting, Accounts Receivable Accounting, and Accounts Payable Accounting want to use different reports to access their data.



- **In the information system for each area**
- **On the general report selection screen**
- **In a user menu based on one of the roles (for example, Accounts Receivable/Payable Accountant)**
- **Generally: System -> Services -> Reporting**
  - **Advantage: This menu is available on every screen**
  - **However: You need to know the name of the report**

Figure 1: Where Are the Reports?

You can find the reports you require in various places in the system:

- You can access important reports using the **information system for each area** (General Ledger, Accounts Receivable, Accounts Payable) and on the general report selection screen.
- Reports are also included in **role-based user menus**.
- Under *System*, choose ***System Services → Reporting***. The general ABAP program execution screen appears and you can enter the report name. If you do not know the technical name of the report, you can use F4 help and placeholders (for example, RFD*) to obtain an overview of the reports contained in General Ledger, Accounts Receivable, and Accounts Payable Accounting, in addition to the reports in the information system for each area.

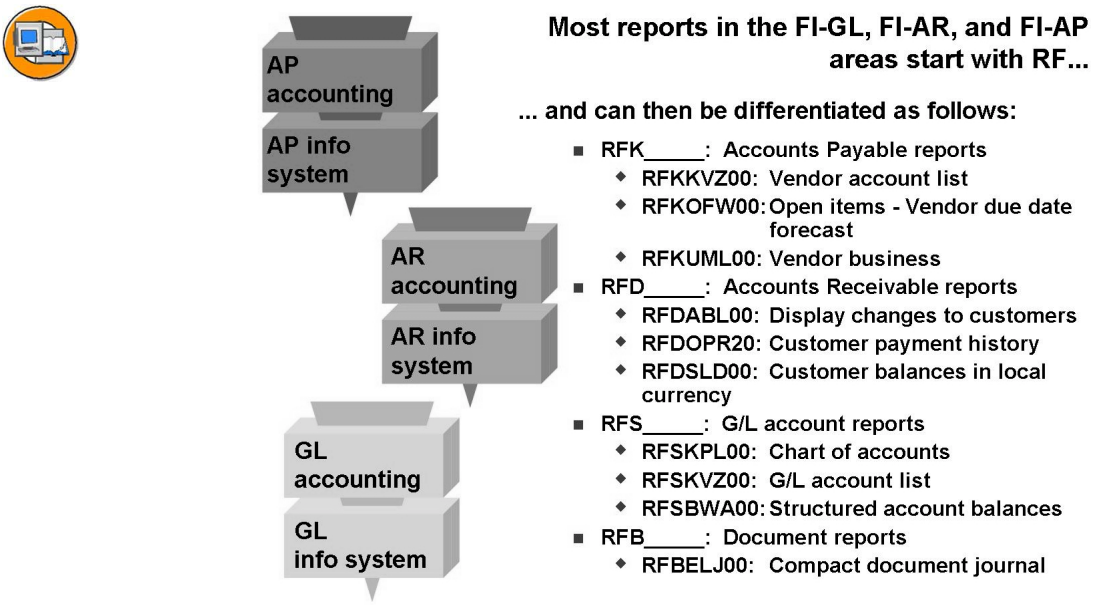


Figure 2: Report Names

You can often work out the names of the standard reports from the letters they contain. For example, the name of the **vendor** account list is **RFKKVZ00**, the name of the **customer** account list is **RFDKVZ00**, and the name of the **G/L account** list is **RFSKVZ00**.

The reports that start with **RF** are differentiated by account type. Reports start with **RFK_____** (for vendors), **RFD_____** (for customers), **RFS_____** (for G/L accounts), and **RFB_____** (for document reports).

To display program documentation, choose **I**.

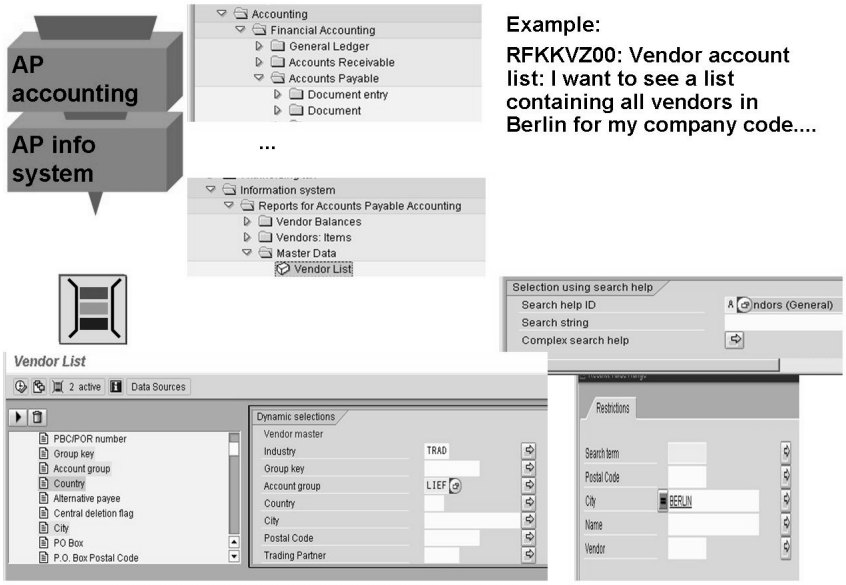
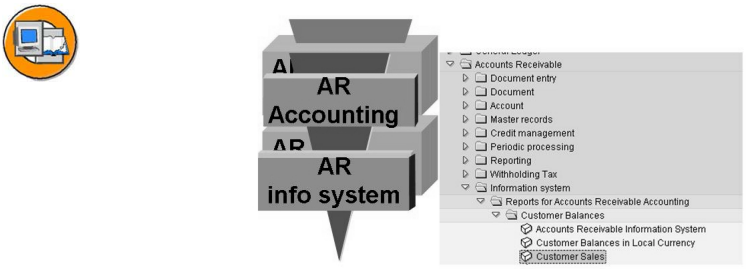


Figure 3: Accounts Payable Information System: Reports for Accounts Payable Accounting

The Accounts Payable information system is split into reports for vendor balances, vendor items, master data, and payment transactions. This information system contains all the key reports that you need as an accounts payable accountant.

In *Dynamic Selections*, you have various selection options (for example, industry, account group, country, city, and so on).

If you use the search help, you will also receive complex selection options that you can use for different reports.



Example:

RFDUML00: Customer sales

I want a list of the customers in my company code where the sales for the reporting periods of the current fiscal year are between 1,000 and 100,000 currency units, and between 1,000,000 and 10,000,000 currency units. I want the list to be sorted by customer sales...

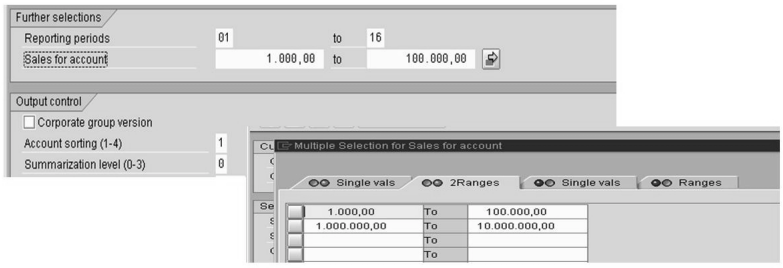
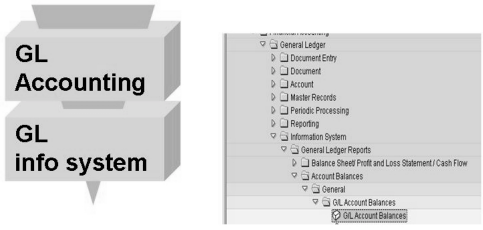


Figure 4: Accounts Receivable Information System: Reports for Accounts Receivable Accounting

When you use the selections and output control, you can restrict the data displayed in the list. For example, for report RFDUML00, Customer Sales, you can create a current or historical customer list that is sorted by the customer's sales. To do this, choose *Additional Selections* and enter appropriate intervals before you run the report.

When you enter the sales, you can use single values or ranges by selecting and/or excluding single values and ranges.



Example:

RFSSLD00: G/L account balances

I want a G/L account balance list for selected figures. In the list, I want to display the carryforward balance at the beginning of the fiscal year as well as the totals for the carryforward period, and the debit and credit totals for the reporting period...

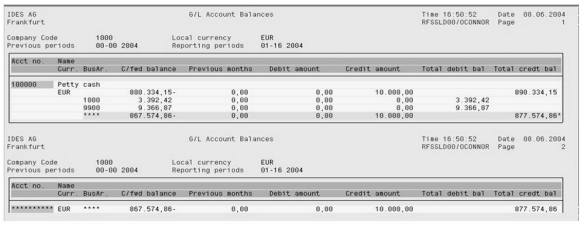


Figure 5: General Ledger Information System: General Ledger Reports

The G/L account balance list displays the selected totals figures by reporting period. You can see the carryforward balance at the start of the fiscal year, the total for the carryforward period, the debit and credit total for the reporting period, and the debit and credit balances at the end of each reporting period.

At the end of the list, you can see the total for each company code and the final total for all company codes for each local currency.

You can choose a sorting method that also allows you to summarize data using summarization levels. For example, you can summarize data by business area or G/L account.

Lesson Summary

You should now be able to:

- Demonstrate where to find the reports required in General Ledger, Accounts Receivable, and Accounts Payable Accounting
- Explain the importance of information systems
- Execute reports

Lesson: Report Variants and Variables

Lesson Overview

In this lesson, you will learn how to create and use report variables.

Lesson Objectives

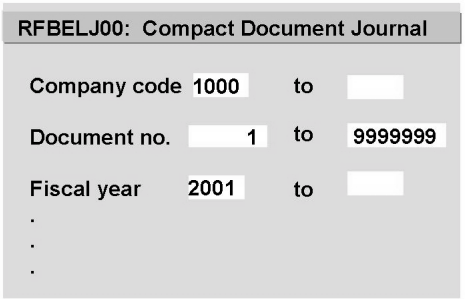
After completing this lesson, you will be able to:

- Create report variants
- Use report variables

Business Example

Employees in General Ledger Accounting, Accounts Receivable Accounting, and Accounts Payable Accounting want to use different selection criteria to access their dataset. Employees need to be able to save these selection criteria (some of which will not change for a long time) so that they can access the data quickly and easily.

- **Variants**
  - **Enable you to:**
    - **Execute a report repeatedly with different selection criteria in different variants.**



To access the same selection criteria when you create reports, ...

- **Enter the required selection criteria once.**
- **Save them as a variant.**

Figure 6: Report Variants: Selection Criteria

You can define multiple **report variants** for one report. These report variants contain different **selection criteria**. A **variant** is a **selection memory** for a specific quantity of **saved selection criteria**. Instead of entering values for selection criteria each time you start the report, you enter the values only once and then save the variant. The next time you execute the report, you can use the variant. The option of creating variants with your own selection criteria, thereby reducing time and effort later, is particularly useful for reports that are used frequently or periodically.

A report can therefore have different **report variants**, each of which provides a specific type of information based on the **selection criteria** that you define. For example, for report RFKKVZ00 (Vendor Account List), you can use one variant for domestic vendors and another for foreign vendors.

First, enter the required selection criteria on the selection screen. The options available for the selection criteria in the individual reports are explained in the following figures.

Choose *Goto →Variants → Save as variant*.

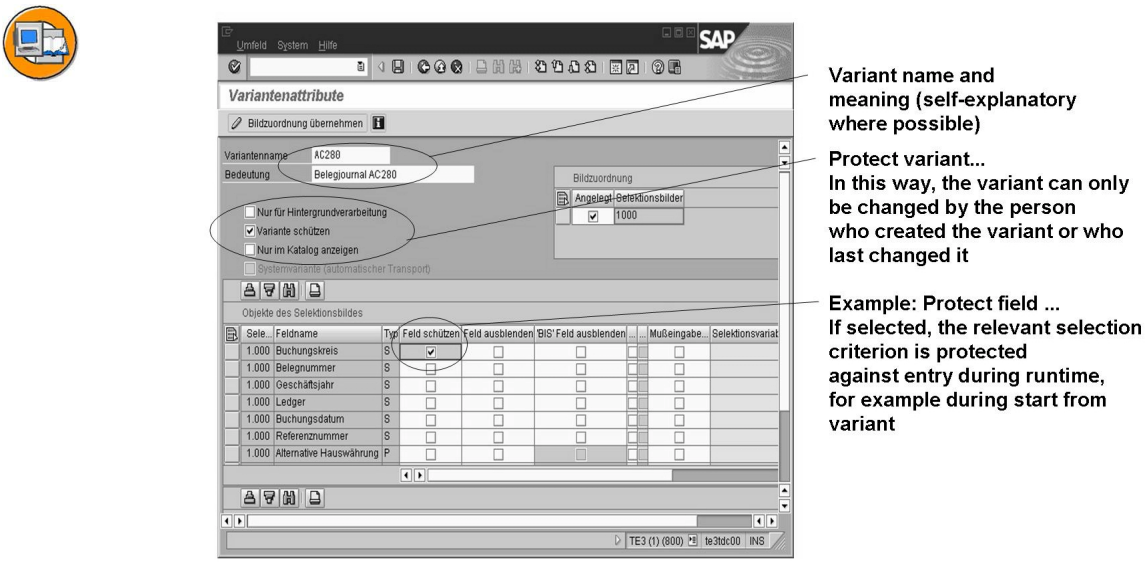


Figure 7: Report Variants: Attributes

Enter variant attributes for your variant; first a *Variant name*, and then the *Description*.

If you select the *Only for background processing* field, then the variant is only permitted for background processing. If you do not select the field, the variant is permitted for background and online processing.

If you select the *Protect variant* field, then only you can change the variant.

System variants are only displayed in the catalog and not in F4 Input Help if you select the relevant indicator.

You can assign certain properties to some fields. For example, you can *protect a field*, *hide a field*, or make a field a *required entry field*.

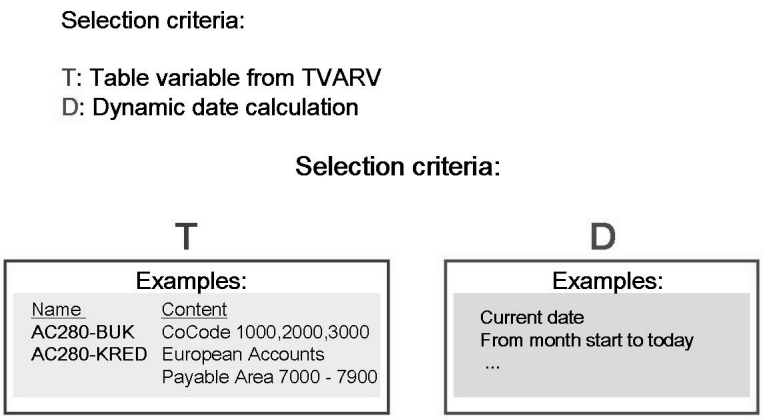


Figure 8: Report Variants: Selection Variables

Instead of entering values for selection criteria each time you start a report, you can enter the values only once and then save them in a **variant**. If you call up the report and use a variant, but still want to display certain values up to the current date (for example, open items up to a certain key date), you can use **selection variables**.

If, for example, you want to see all the items up to a specific key date in a report, you can choose the *Selection Variable* pushbutton when **maintaining attributes** or more specifically when maintaining the **selection screen objects** and then you can choose the type of selection variable.

Currently, the following **two types of selection variables** are supported (but not for each selection criterion):

- Table variables from TVARV
- Dynamic date calculation

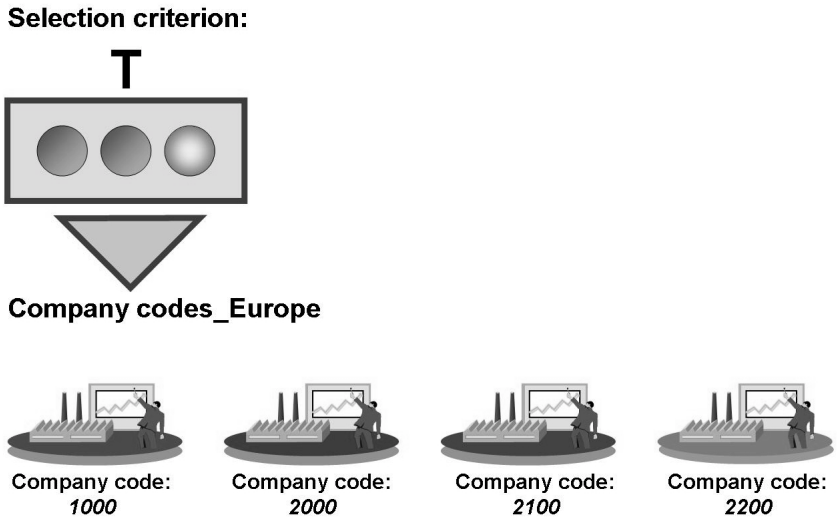


Figure 9: Table Variables

Table variables from TVARV: You use these variables when you store statistical information that can be used in different reports. This means that when you **save the attributes for the variant**, you can maintain parameters in table TVARV that contain your selection options, single values, and/or intervals by choosing *Maintain environment → Selection variables*. Once you have maintained these selection variables in table TVARV, you can use them in any other report variants and reports.

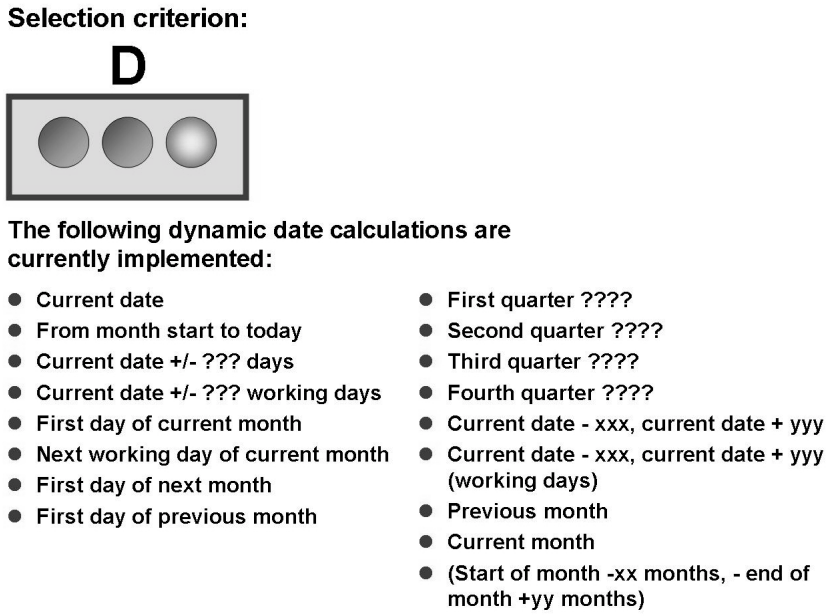


Figure 10: Dynamic Date Calculation

Dynamic date calculations:

The prerequisite for using these variables is that the corresponding selection criterion in the program is type **D** (date). If you change the selection variable from type T to type D, the *Name of Variables* field is no longer ready for input. You can only set values using input help.

Exercise 1: Report Variants and Variables

Exercise Objectives

After completing this exercise, you will be able to:

- Create report variants
- Use report variables

Business Example

You want to replicate the same report using the same selection criteria.

Task 1:

Create a **variant** for **report RFBELJ00** (compact document journal).

1. Create a **report variant** with the **name** and **description AC280-1-##** (## = your group number) for the compact document journal **RFBELJ00** such that only **documents 0100000000 to 0199999999** are displayed in **company code 1000** in the **current fiscal year**.

   Execute this report with your report variant.

2. Change your **variant** with **name** and **description AC280-1-##** such that your **variant is protected**. The **company code** must **not be changeable**. The **fiscal year** is a **required entry field** and the **document number ranges** must not contain just **documents 0100000000 to 0199999999, but also documents 1700000000 to 1799999999** and **1800000000 to 1899999999**. For the **posting date**, choose a **dynamic date calculation**, with the posting date **from the beginning of the month to today**.

   Hide all other fields.

Task 2:

To group the many vendors in a meaningful way, the accounts have been split into account groups. To obtain an overview of the existing vendor master records, you want a list containing specific vendors.

1. Using report **RFKKVZ00**, create a **report variant AC280-2-##** (## = your group number) with a list of all vendors in **account group LIEF** that are **located in Berlin**.

   Only vendors in **company codes 1000, 2000, 2200, 3000, 4000, 5000, and 6000** are to be included. Since this company code range is also relevant to other reports and you do not want to maintain these company codes individually in each selection variant, use selection variables.

Continued on next page

Create the *selection variable* AC280_GR##.

Task 3:

Optional:

1. To be able to perform a targeted advertising campaign, you are asked to create a **list of customers in high tech industries (HITE) and mechanical engineering (MBAU)** with **sales between 2,000,000 and 1,000,000 currency units** (an **entry** that you should **protect** in the variant) in the **periods of the current fiscal year** in **company codes 1000, 2000, 2200, 3000, 4000, 5000, and 6000**.

   You want to display the data in currency **USD**, with **exchange rate type M** for translation of exchange rates **at the current key date**.

   Create a **variant** with **name** and **description AC280-3-##** (## = your group number).

Task 4:

1. Specify the **menu path for the report documentation**.

Solution 1: Report Variants and Variables

Task 1:

Create a **variant** for **report RFBELJ00** (compact document journal).

1. Create a **report variant** with the **name** and **description AC280-1-##** (## = your group number) for the compact document journal **RFBELJ00** such that only **documents 0100000000 to 0199999999** are displayed in **company code 1000** in the **current fiscal year**.

   Execute this report with your report variant.

   a) ***Create a report variant:***

   Menu path: ***System → Services → Reporting***

   (or in the SAP Easy Access menu:

   Accounting → Financial Accounting → General Ledger → Information System → General Ledger Reports (New) → Document → General → Compact Document Journal

Field name or data type	Values
Program	`RFBELJ00`

Choose *Execute*.

Enter your selection criteria:

Field name or data type	Values
Company code	1000
Document no.	`0100000000 to 0199999999`
Fiscal Year	*Current Year*
Ledger	`0L`

Menu path: ***Goto → Variants → Save as variant...***

Field name or data type	Values
Variant	`AC280-1-##`
Description	`AC280-1-##`

Choose *Save*.

Continued on next page

Execute the report.

Menu path: System → Services → Reporting

(or in the SAP Easy Access menu:

Accounting → Financial Accounting → General Ledger → Information System → General Ledger Reports (New) → Document → General → Compact Document Journal

Execute **RFBELJ00** with the new variant **AC280-1-##**.

Program: **RFBELJ00**

Program → Execute with variant (or *Variant* button)

Variant: **AC280-1-##**

Enter

Execute

2. Change your **variant** with **name** and **description AC280-1-##** such that your **variant is protected**. The **company code** must **not be changeable**. The **fiscal year** is a **required entry field** and the **document number ranges** must not contain just **documents 0100000000 to 0199999999, but also documents 1700000000 to 1799999999** and **1800000000 to 1899999999**. For the **posting date**, choose a **dynamic date calculation**, with the posting date **from the beginning of the month to today**.

   Hide all other fields.

   a) Menu path: *System → Services → Reporting*

Field name or data type	Values
Program	`RFBELJ00`

   Choose *Goto → Variants*.

   Enter `AC280-1-##`

   Choose *Variants → Change → Change values*.

   After the document number, choose the *Multiple selection* button.

   Choose the tab page *Ranges*

   Enter `0100000000` to `0199999999`,

   `1700000000` to `1799999999`,

   and `1800000000` to `1899999999`.

   Choose Execute.

Continued on next page

Choose *Variant* → *Attribute* (or the *Variant Attribute* button).

Field name or data type	Values
Protect variant	`Select`
Company code	Protect field
Fiscal year	`Required entry field`
All other fields **except** Posting Date	Choose *Hide field*

Field name: *Posting date*

Pushbutton: *Selection variable*. Selection (matchcode: Select icon)

Type of variable:

Select "D" (for dynamic date calculation).

Choose the *Name der Variable* pushbutton (entries only possible using input help)

Double-click "From month end to today".

Save the variant.

When the system displays the message "Do you want to overwrite variant AC280-1-##?", choose *Yes*.

Execute *RFBELJ00* with the changed variant *AC280-1-##*:

Program: **RFBELJ00**

Program → *Execute with variant* (or *Variant* button)

Variant: **AC280-1-##**

Choose Enter. Pay attention to the selection options

Execute

Task 2:

To group the many vendors in a meaningful way, the accounts have been split into account groups. To obtain an overview of the existing vendor master records, you want a list containing specific vendors.

1. Using report **RFKKVZ00**, create a **report variant AC280-2-##** (## = your group number) with a list of all vendors in **account group LIEF** that are **located in Berlin**.

Continued on next page

Only vendors in **company codes 1000, 2000, 2200, 3000, 4000, 5000, and 6000** are to be included. Since this company code range is also relevant to other reports and you do not want to maintain these company codes individually in each selection variant, use selection variables.

Create the *selection variable* AC280_GR##.

a) Create a report variant:

Menu path: ***System → Services → Reporting: RFKKVZ00***

(or in the SAP Easy Access menu:

Accounting → Financial Accounting → Accounts Payable → Information System → Reports for Accounts Payable Accounting → Master Data → Vendor List)

Report: **RFKKVZ00**

Choose *Goto → Variants*.

Field name or data type	Values
Variant	***AC280-2-## (## = group number)***

Choose *Variant → Create*.

Choose *Edit → Dynamic selections*.

Select ***Account group***

Pushbutton: **Choose the *Copy selected* (arrow) button.**

Account group: `LIEF`

When *Selection via search help* appears, enter:

Search help ID: `A` **(Vendors general)**

City: `Berlin`

Enter

Choose *Edit → Attributes*.

Description	***AC280_2_##***

Choose *Environment → Maintain selection variables*.

Choose *Variables → Change*.

You will receive the message, “The table is cross-client.”

Continued on next page

Choose *Enter*.

Choose the *Selection options* tab page.

Choose *Edit* → *Create*.

Name: **`AC280_GR##`** (## = your group number)

Choose the *Multiple selection* button.

Enter company codes **`1000, 2000, 2200, 3000, 4000, 5000, and 6000`**

Choose *Execute*.

Choose *Save*.

Choose *Back*.

Field Name: Company code

Pushbutton: *Selection variables*

Type of variable: T: Table variables from TVARV

Pushbutton: Name of variable (entry only possible using input help)

Select AC280_GR## from the list

Save the variant.

Execute **RFKKVZ00** with the variant **AC280-2-##**.

Program: **RFKKVZ00**

Program → *Execute with variant* (or *Variant* button)

Variant: **AC280-2-##**

Choose *Enter*. Pay attention to the selection options.

Choose Execute.

Task 3:

Optional:

1. To be able to perform a targeted advertising campaign, you are asked to create a **list of customers in high tech industries (HITE) and mechanical engineering (MBAU)** with **sales between 2,000,000 and 1,000,000 currency units** (an **entry** that you should **protect** in the variant) in the **periods of the current fiscal year** in **company codes 1000, 2000, 2200, 3000, 4000, 5000, and 6000**.

   You want to display the data in currency **USD**, with **exchange rate type M** for translation of exchange rates **at the current key date**.

Continued on next page

Create a **variant** with **name** and **description AC280-3-##** (## = your group number).

a) Report: **RFDUML00**

Variant with name and description **AC280-3-##** (## = your group number)

Create a report variant

Choose

System → Services → Reporting: RFDUML00

or, in the *SAP Easy Access* menu, choose

Accounting → Financial Accounting → Accounts Receivable → Information System → Reports for Accounts Receivable Accounting → Customer Balances → Customer Sales.

Report: **RFDUML00**

Choose *Goto → Variants→ Save as Variant*.

Field name or data type	Values
Variant	`AC280-3-##` (## = group number)

Choose *Variant → Create*

Choose *Edit → Dynamic selections*.

Industry: **HITE (High Tech) and MBAU**

Reporting periods: **1 to 16**

Sales for account: **100 to 1,000,000 currency units**

Fiscal year: **Current fiscal year**

Translate in output currency: **Select**

Currency: **USD**

Exchange rate type: **M**

Date: **Current date**

Enter

Choose *Edit → Attributes*

Description: **AC280-03-##**

Field Name: Company code

Continued on next page

Pushbutton: *Selection variables*

As the variable type, choose *T: Table variables from TVARV*

Pushbutton: Name of variable (entry only possible using input help)

Select AC280_GR## from the list

Under *Sales for account*, choose *Protect field*.

ER_DATUM (translation date)

Pushbutton: *Selection variable*. Selection (matchcode: Select icon)

Type of variable: Select "D" (for dynamic date calculation) and then choose the *Name der Variable* pushbutton (entries only possible using input help)

Choose *Current Date*

Save the variant.

Execute **RFDUML00** with the variant **AC280-3-##**.

Program: **RFDUML00**

Program → Execute with variant (or *Variant* button)

Variant: **AC280-3-##**

Choose *Enter*. Pay attention to the selection options.

Execute

Task 4:

1. Specify the **menu path for the report documentation**.

   a) *Choose Report documentation.*

   On the report selection screen, choose *Help → Application help*.

   Help → Application help

   You have created new variants and worked with:

   - Dynamic selections
   - Selection variables

Lesson Summary

You should now be able to:

- Create report variants
- Use report variables

Unit Summary

You should now be able to:

- Demonstrate where to find the reports required in General Ledger, Accounts Receivable, and Accounts Payable Accounting
- Explain the importance of information systems
- Execute reports
- Create report variants
- Use report variables

Unit 2

List Viewer

Unit Overview

How can users work efficiently with the List Viewer, for example, to display their open item lists? The SAP variants are useful, but users have their own ideas about how the list should look.

Unit Objectives

After completing this unit, you will be able to:

- Explain the concept SAP List Viewer
- Use the functions of the SAP List Viewer
- Use selection criteria for accounts in which you want to find line items in specific company codes
- Choose selection criteria using search help
- Choose line items based on their status and category
- Change standard and user-specific screen layouts

Unit Contents

Lesson: SAP List Viewer Design

Lesson Overview

In the SAP List Viewer, you can display different variations of documents and use different designs.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the concept SAP List Viewer
- Use the functions of the SAP List Viewer

Business Example

The manager of the accounting department wants to know how to create standardized lists in the SAP system. He also wants to learn more about the functions of the SAP List Viewer.

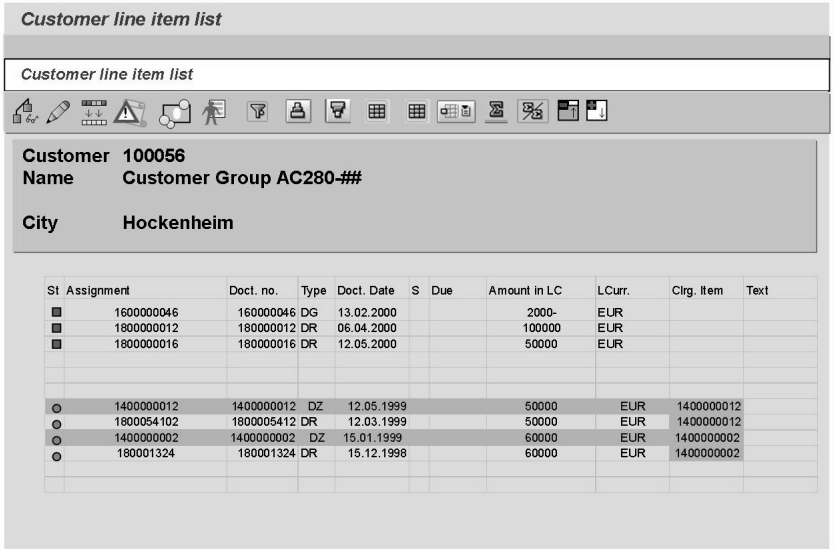


Figure 11: SAP List Viewer: Line Item List

The SAP List Viewer is a generic display tool that creates a standard ergonomic list from predefined data.

The List Viewer standardizes and simplifies the use of lists in the SAP system by providing a uniform interface and list preparation function.

You can use the List Viewer to display simple and hierarchical sequential lists.

The SAP List Viewer contains a number of interactive functions such as sorting, summation, filters, and so on.

You can change the layout of lists without selecting data first and save the changed list layout in variants.

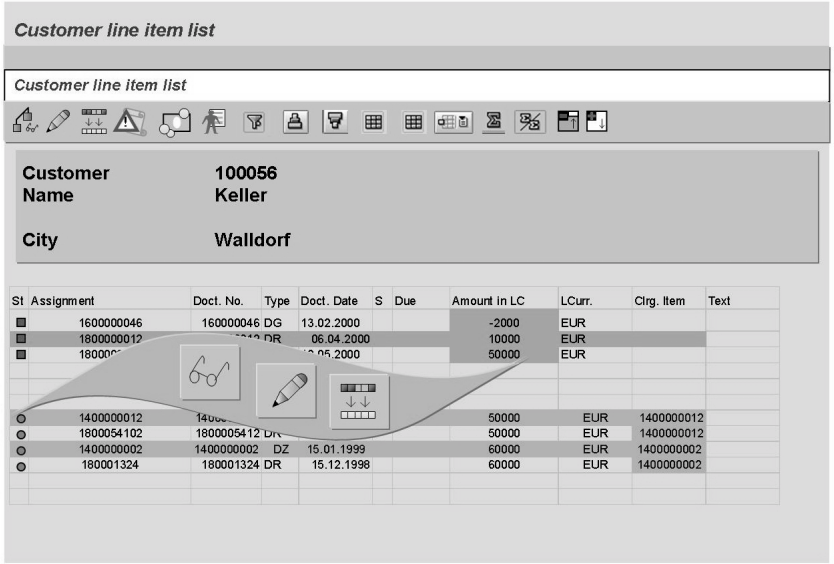


Figure 12: SAP List Viewer: Display/Change Documents

The SAP List Viewer provides the following functions for displaying and changing documents:

Select detail

To get detailed information for an item, you have to select it first. You can then use the *eyeglasses* icon (or double-click the item) to display the individual document. You can also call up the item with the *pencil* icon if you want to make changes to the document.

Select items To select an item, select it on the left side of the line item list. To select multiple items, select a single item, hold **Ctrl**, and select the other items. To select all the items, use the appropriate icon.

Once you have selected multiple items, you can carry out a **mass change** in the corresponding documents. To see the changes in the line item list, choose *Refresh List*. If changes fail, you can see the reasons in the **Change errors log** using the corresponding pushbutton.

You can choose whether you want to branch to the **document item view or the document overview** of the document display. The accounting editing options contain a corresponding checkbox.

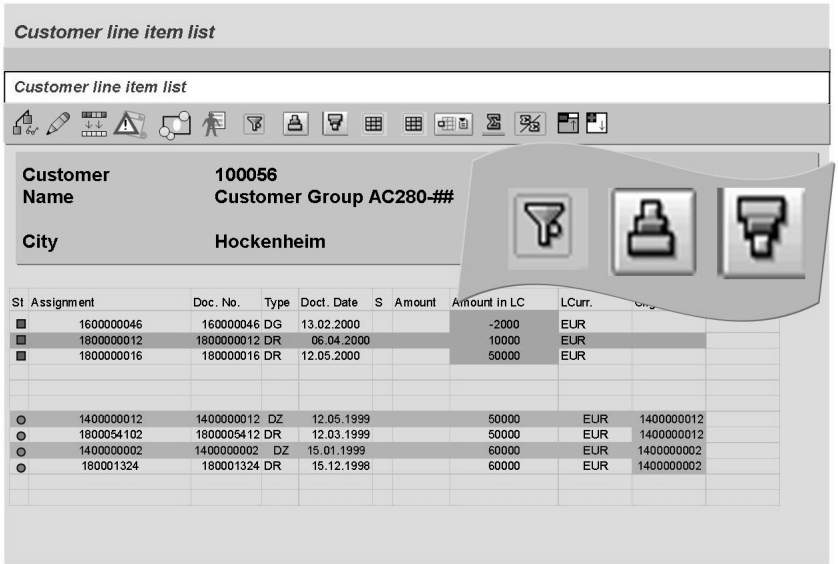


Figure 13: SAP List Viewer: Generic Functions

Some of the functions provided by the SAP List Viewer include the following generic cross-application functions:

Select columns: To select a column, you click the column heading once. To select multiple columns, select a column, hold **Ctrl**, and select the required columns.

You can **sort** the list in ascending or descending order. Sort the list by selecting the required column and then choosing the corresponding function.

You can set and delete **filters** the same way.

Summation: You can create **totals and subtotals** for specific values. Create totals by selecting the required column and then choosing the appropriate icon.

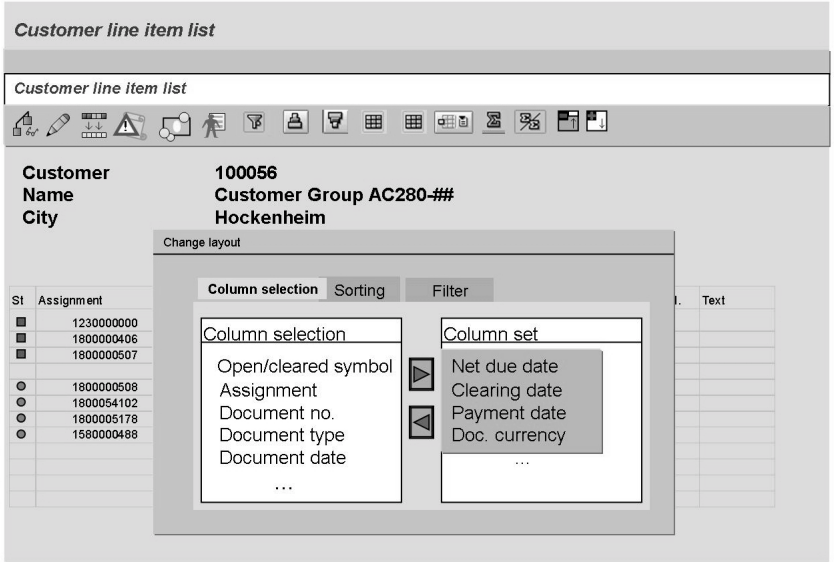


Figure 14: List Viewer: Display Variants and Fields

In addition to the display variants provided by SAP, you can also create your own display variants. This allows you to define your own specific view of a list.

You select fields that you want to see from the **fields available in the column set**. You can hide fields that you do not require. You can also sort **fields in the column selection** in the order that you require.

You can also add **special fields** to the column set in addition to the fields that are already displayed. For more information, refer to SAP Notes 215798 and 420591.

If you require **offsetting account information**, refer to SAP Note 112312. This is not a modification of the standard system, but a business transaction event.

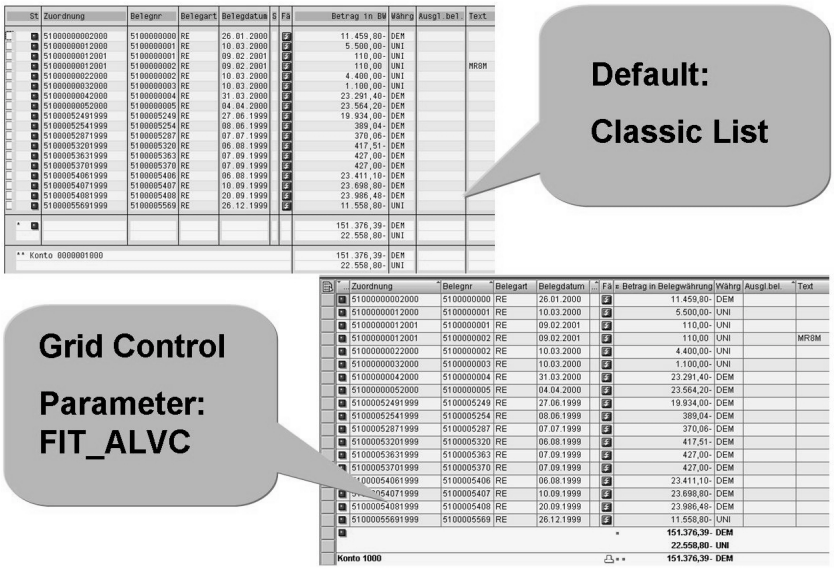


Figure 15: Classic List and Grid Control in the Line Item List

When you display the list, you can choose between the **ALV classic list** and the **ALV grid control** (grid design).

With some lists, you cannot switch between the two layouts; this is a special feature of the line item list.

The ALV classic list is the list that is displayed when no specific settings have been made.

The ALV classic list is essentially the **print screen** and offers a better **overview of the sorted list** when the items for multiple accounts are displayed.

The grid control design has proportionate text and is particularly useful when you **display individual accounts online** for Internet services offered by SAP programs.

Since SAP R/3 4.6C, users have been able to select the grid design by choosing *Settings → Switch List*. This list design is entered in the user parameters (parameter **FIT_ALVC**) when you switch the list.

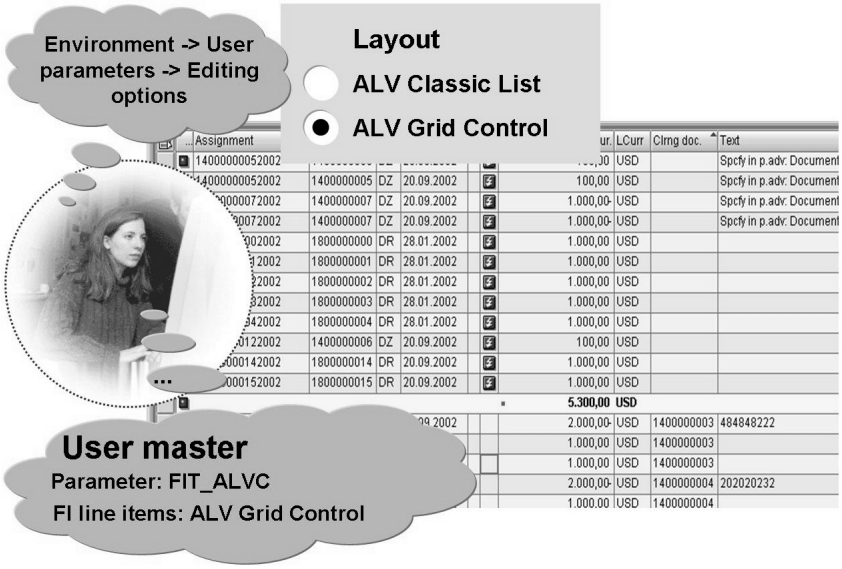


Figure 16: User Parameters for the List

You can display (and change if necessary) the settings using transaction FB00, the *accounting editing* options on the *Line Items* tab page. You can also display and change parameters using transaction SU3.

Using **parameter IDs**, you can enter user default values in fields where the value usually remains constant. If, for example, you switch the list to grid control, the value will be saved in your user parameters. When you call up the list, this value appears automatically in the corresponding design. This means that you do not have to manually switch the list again. The next time you log on to the system, you do not have to re-select the required layout.

Lesson Summary

You should now be able to:

- Explain the concept SAP List Viewer
- Use the functions of the SAP List Viewer

Lesson: Selections

Lesson Overview

Participants can use specific selection criteria to choose line items that they wish to analyze. These selection criteria are related to:

- The accounts for which you want to see line items; these are created within specific company codes
- Selection criteria that can be chosen using search help and the selection of the line items themselves, based on their status and category

Lesson Objectives

After completing this lesson, you will be able to:

- Use selection criteria for accounts in which you want to find line items in specific company codes
- Choose selection criteria using search help
- Choose line items based on their status and category

Business Example

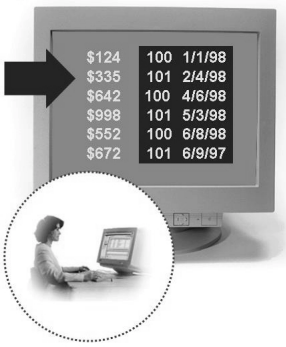
Employees working in Accounting want to know how to select items in lists in the SAP system.

It also wants to learn more about the selection criteria that can be used in the SAP List Viewer.

Selection criteria

- **G/L account/customer account/vendor account**
- **Company code**

Users can restrict the data displayed on the *Line Item List* screen using specific criteria.



- **Selection using search help**
- **Item selection**
  - **Item status**
  - **Item type**
- **List output**

Figure 17: Line Item List

You can use specific **selection criteria** to choose line items that you want to evaluate.

These selection criteria refer to:

- The accounts in which you want to see line items in specific company codes
- Selection criteria that you can choose using search help
- The selection of line items themselves, based on their status and category

In addition, you can also choose the following for the **list output**:

- Layout
- Maximum number of items

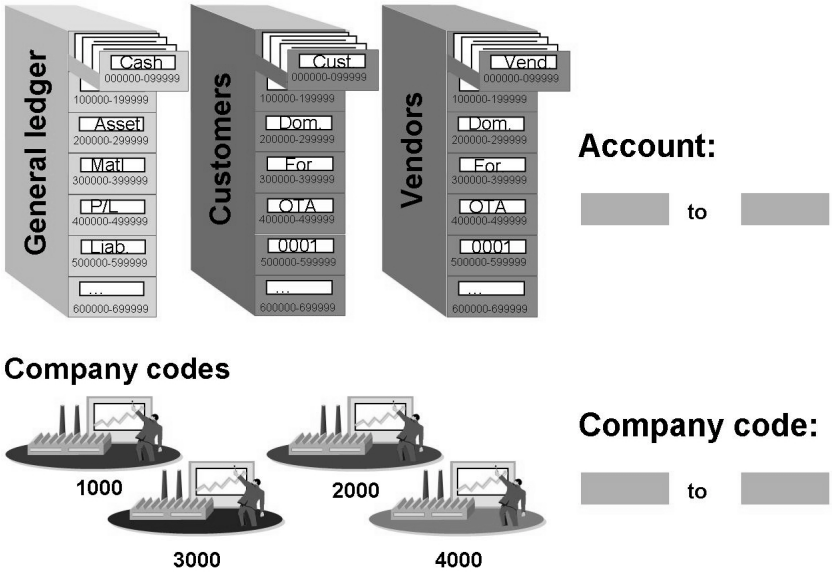


Figure 18: Selection of G/L Account, Vendor, and Customer

When you make your **account selection** for G/L accounts, customer accounts, and vendor accounts, you can use **simple and multiple selection** to include or exclude individual **accounts and account intervals** from the selection.

If you select the *Worklists Available* field, you can activate and deactivate the **input fields for worklists** on the selection screen for each line item list. If the worklists exist, when you select the *Worklist Input Fields Active* field when you call up the selection screen for the line item display, this selection screen is displayed with input fields for worklists. You can maintain the values for worklists using transaction OB55.

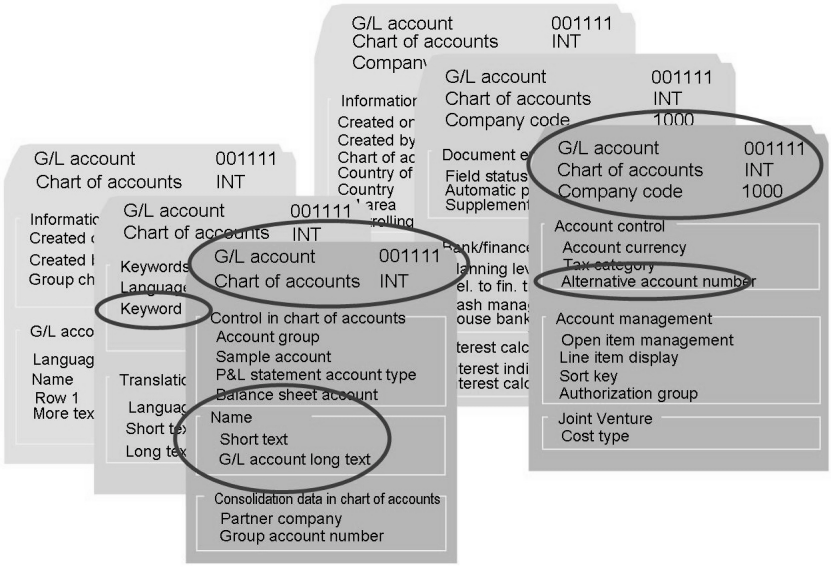


Figure 19: Selection using Search Help

If you select items using **search help**, the system provides **input help for the G/L account line item list**:

- G/L account number in chart of accounts (also in combination with the company code specification)
- G/L account name (G/L account long text) in chart of accounts (also in combination with the company code specification)
- G/L accounts with deletion and block indicators
- Keywords
- Alternative account numbers

When you select items using search help, the system offers **input help for the vendor line item list**:

- General vendor data (search term, postal code, city, name, and number of vendor)
- Vendor country/company code
- Vendor by personnel number
- Vendor by purchase, material, or plant reference

When you select items using search help, the system offers **input help for the customer line item list**:

- General customer data (search term, postal code, city, name, and number of customer)
- Customer country/company code/account group
- Customers with rental agreement
- Customers for each sales group or with plant reference
- Head office customers

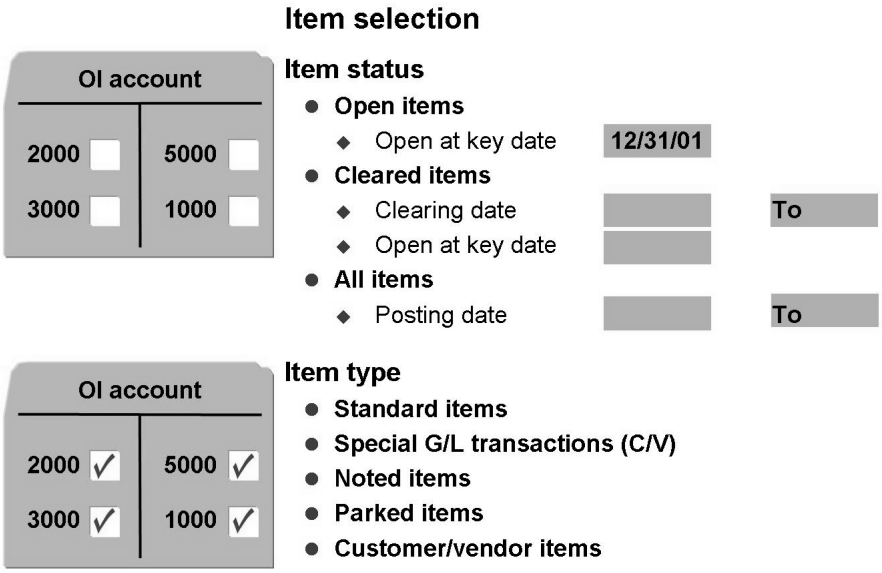


Figure 20: Item Selection

You can select items for the line item list based on their **status and category**.

When you select **open items**, you select items that are or were open at a **specific time**. The current date is proposed by default.

If you choose *Cleared Items*, the system displays items that were cleared by the **clearing date specified** and that were still **open on the key date**. If you do not specify the clearing date and the key date, the system displays all the cleared items.

If you want to see open and cleared items, choose *All Items*. You can restrict this selection using the posting date.

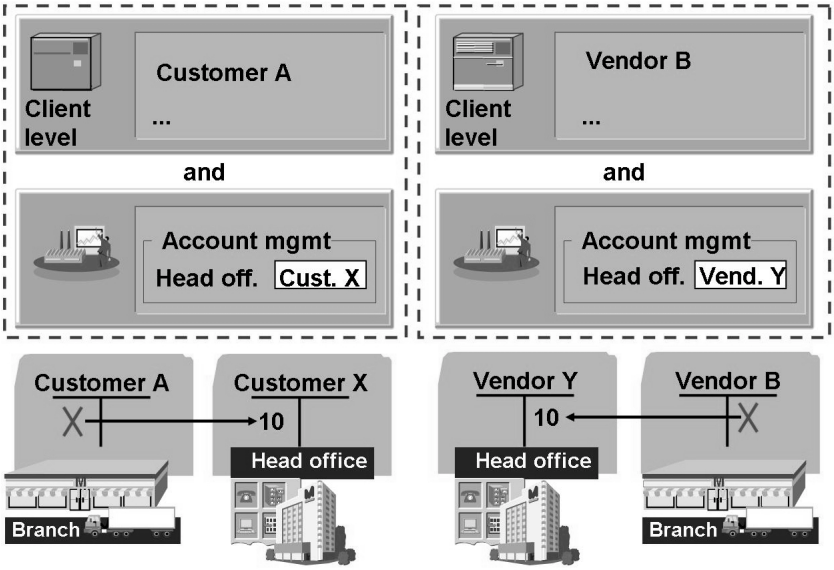


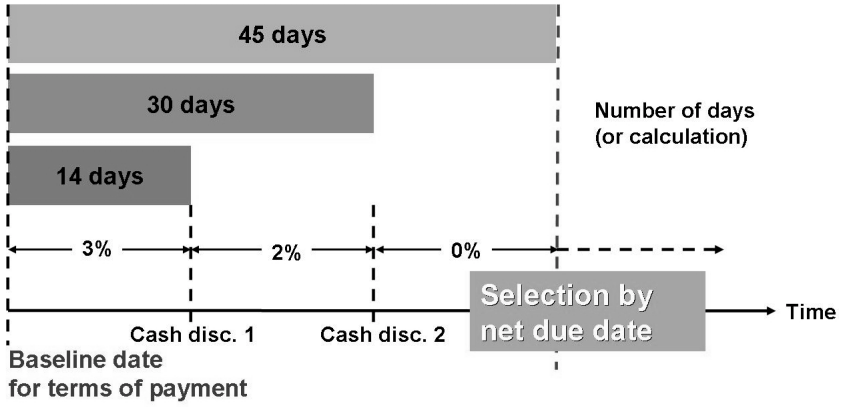
Figure 21: Head Office/Branch

In some industries, customers submit orders locally -- that is, via the branch -- but pay invoices centrally through the head office. SAP differentiates between the flow of goods and the flow of money. In the SAP system, you can set up **head office and branch accounts**.

All items posted to a branch account are automatically forwarded to the head office account.

If you select the *Branch/Head Office* indicator, a **dialog box** appears for each branch account. In the dialog box, you can choose whether the branch can display items that are managed at the head office.

If you deactivate the dialog box, the setting made in the *Items Managed at Head Office* field applies automatically.

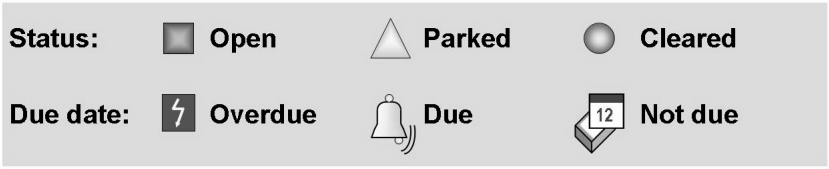


The net due date is calculated from the terms of payment baseline date and the highest number of days within the terms of payment.

Figure 22: Selection by Net Due Date

When you display the line items, you can make a **selection by net due date**.

If you select the *Selection by Net Due Date* field in the editing options of the user parameters, the system activates the **input fields** for the **selection by net due date** on the *Selection* screen.



Item cleared/open icon

- **Open item:** The item was posted by the key date. It was cleared after the key date or has not yet been cleared.
- **Cleared item:** The item was posted by the key date and cleared.
- **Parked item:** Item was parked.

Icon for *Net due date for open items at key date*

- Item is **overdue:** At the key date, the net due date has already passed. The payment is in arrears.
- Item is **due:** At the key date, the item is due for payment without deductions.
- Item is **not due:** The net due date was after the key date.

Figure 23: Key for Icons

In the **header of the ALV classic list**, you can display the **key for the icons** for the **item status (open, parked, cleared)**, as well as the icons for the **due date (overdue, due, not due)**.

In the editing options for the line items display, you can select whether you want to see these **keys** when you call up the list.

Comment: The key date is the determining factor in classifying whether an item is open or cleared. By backdating an item, you can display the status of the item on a key date in the past. Items posted after the key date are not displayed.

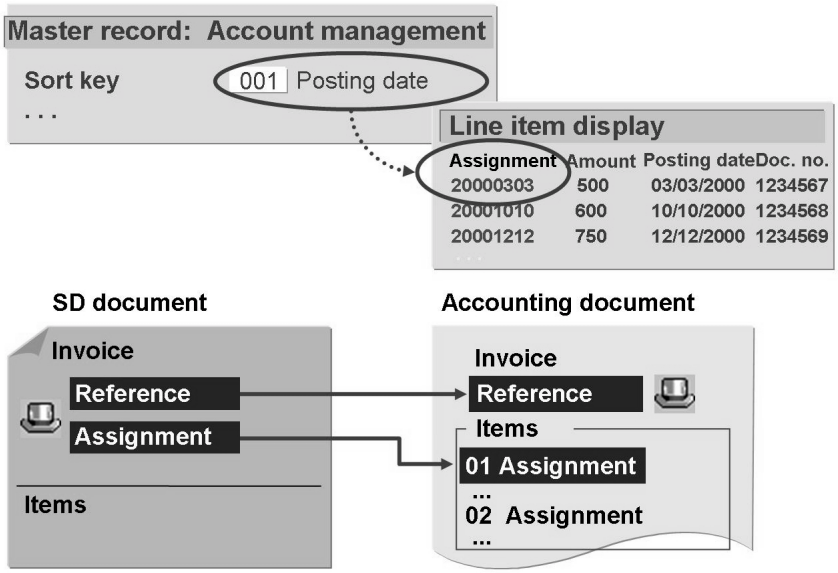


Figure 24: The Assignment Field as Sort Field

In addition to selecting columns, when you create or change the layout, you can also define **sort criteria for sorting** and create **subtotals**.

The system automatically fills the assignment field for a line item according to the *Sort Field* entry in the master record when you post items.

The assignment field can be a combination of up to four fields with a maximum of 18 characters. For example, to display the document number (10 characters) and the posting date (six characters), these field names can be included in the assignment field definition.

If you chose the *Purchase Order Number* sort key in the customer/vendor master record, the assignment field for the line item contains the purchase order number for customers/vendors.

If you selected the sort key for the *Cost Center* in a general ledger master record, the assignment field in the corresponding G/L account item for the line item contains the number of the cost center when you post to this G/L account.

The line items in the line item display are frequently sorted by the value in the assignment field. A practical example:

- For example, when an invoice is posted in SD, an accounting document is created in FI. The accounting document has a document number that is usually not identical to the number of the invoice in SD. Using the reference and the assignment, you can find out the SD document on which the accounting document is based. The reference and the assignment in the FI invoice are copied from the reference and assignment in the SD billing document. You can define which numbers (purchase order, sales order, delivery, billing document) are copied as a reference and which are copied as an assignment in the SD document and then copied into FI. You can then use these fields as selection criteria in FI.

Exercise 2: Selections

Exercise Objectives

After completing this exercise, you will be able to:

- Use the SAP List Viewer, using the line item list as an example
- Find out what selection criteria appear in the selection for the line item list

Business Example

The accounting department wants to know how to select items from lists in the SAP system, and which selection options are available.

Task:

You have learned about the **SAP List Viewer** as a tool for **preparing** standardized lists, and now you want to investigate the options the tool provides in your work area. You therefore look at the customer line item list.

Look at the customer line item list for customer **1033** in company code 1000. Select the **open items** and choose **today's date as the key date.**

1. You want to sort the assignment column. What sort options are there? How do you proceed?
2. In addition, you only want to display documents that contain amounts up to **40 currency units**. How can you do this? How do you **display all the documents again**?
3. For customer **1033** you also want to display a **totals line for a subtotal according to the payment date**.
4. A colleague informs you that you can also display the list in grid design, in addition to the ALV classic list design. You now want to use grid design.
5. You want to display the ***Payment Date*** and ***Terms of Payment*** columns next to the ***Open/Cleared/Parked Items*** **icon**. How can you move the column to the **required position**?
6. You also want to enter the **business area account assignment** as an **additional field** in the list. You want to display the field **to the left of** the field for the **text**.
7. You do not want to have to move the columns or add new columns each time, and so you want to create a **display variant** in which the required fields are in the correct position and in which the **business area** account assignment is also shown.

Continued on next page

Create an appropriate **user-specific display variant** and save it as **AC280-D-##** (##= your group number) **without** using the default setting. **Display variant AC280-D-##** (## = your group number) is called *with business area*.

Solution 2: Selections

Task:

You have learned about the **SAP List Viewer** as a tool for **preparing** standardized lists, and now you want to investigate the options the tool provides in your work area. You therefore look at the customer line item list.

Look at the customer line item list for customer **1033** in company code 1000. Select the **open items** and choose **today's date as the key date.**

1. You want to sort the assignment column. What sort options are there? How do you proceed?

   a) Choose *Accounting → Financial Accounting → Accounts Receivable → Account → Display/change line items (Transaction FBL5N)*.

Customer:	**1033**
Company code:	**1000**

   Open items

   Open at key date: Current date

   Program → Execute

   b) You can sort the display in ascending or descending order.

   Choose *Edit → Sort in ascending order/Sort in descending order*

   (Alternatively, place the cursor on the column and use the appropriate buttons (*Sort in ascending order* or *Sort in descending order*))

Continued on next page

2. In addition, you only want to display documents that contain amounts up to **40 currency units**. How can you do this? How do you **display all the documents again**?

   a) Set filter/Delete filter:

      Edit → Set filter

      (or, place the cursor on the column and use the *Set filter* button).

Local currency:	**EUR**
Amounts:	**To 40**

      Enter

      Then:

      Edit → Delete filter

3. For customer **1033** you also want to display a **totals line for a subtotal according to the payment date**.

   a) Subtotal for payment date:

      First, select another layout:

      Settings → Display variant → Choose

      (or *Select layout* button)

      Choose **1SAP-P**

      Place the cursor on the *Payment Date* column.

      Edit → Subtotal

      (or, choose Subtotals button)

4. A colleague informs you that you can also display the list in grid design, in addition to the ALV classic list design. You now want to use grid design.

   a) Switch list:

      Settings → Switch list

Continued on next page

5. You want to display the ***Payment Date*** and ***Terms of Payment*** columns next to the ***Open/Cleared/Parked Items*** **icon**. How can you move the column to the **required position**?

   a) *Payment Date* and *Terms of Payment* columns after the Open/Cleared/Parked Items icon:

      Place the cursor on the column and drag the column to the appropriate position (keep finger on the left mouse button)

      (or *Settings → Display variant → Current:*

      move the **selected lines upwards or downwards using the arrows**).

6. You also want to enter the **business area account assignment** as an **additional field** in the list. You want to display the field **to the left of** the field for the **text**.

   a) Additional field (Business area):

      Settings → Display variant → Current:

      In the column set (right): Select *Business area*

      Move it to the column selection (left) using the arrow *Add selected fields*.

      Move the **selected lines upwards or downwards** to the required place using the arrows.

7. You do not want to have to move the columns or add new columns each time, and so you want to create a **display variant** in which the required fields are in the correct position and in which the **business area** account assignment is also shown.

   Create an appropriate **user-specific display variant** and save it as **AC280-D-##** (##= your group number) **without** using the default setting. **Display variant AC280-D-##** (## = your group number) is called *with business area*.

   a) Choose *Settings → Save display variant*.

      You can save the variant under your own name (**AC280-D-##**).

      Save layout: **AC280-D-##**

      Name: ***With business area***

      Select *User-specific*.

      Choose Continue.

      The system issues the following message: “Layout was saved.”.

Lesson Summary

You should now be able to:

- Use selection criteria for accounts in which you want to find line items in specific company codes
- Choose selection criteria using search help
- Choose line items based on their status and category

Lesson: Changing the Screen Layout

Lesson Overview

There are various standard layouts that you can supplement. In this lesson, you will learn about standard layouts and user-specific layouts.

Lesson Objectives

After completing this lesson, you will be able to:

- Change standard and user-specific screen layouts

Business Example

When displaying a list, accountants want to choose between different (standard and user-specific) layouts.

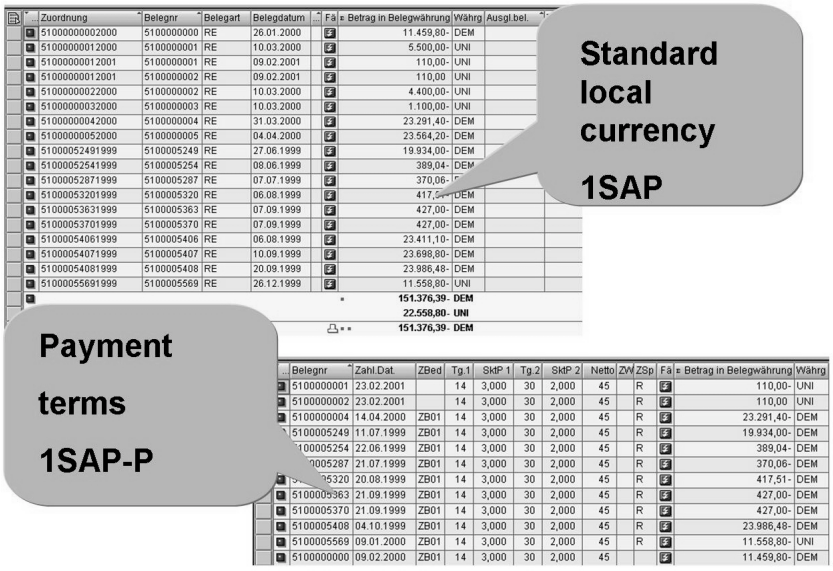


Figure 25: Layout

When you display a list, you can choose between different layouts.

SAP provides various **standard layouts** that you can supplement with other (standard) layouts. Standard layouts start with a **slash (/)**. You can choose a standard layout as your **default layout**. If the indicator for a display variant is set as the **initial variant**, this variant is always used for the list output unless you explicitly specify an alternative display variant.

You can also choose a **user-specific layout**, provided that you can save user-specific display variants.

Enter the **ALV initial layout** in the **accounting editing options**.

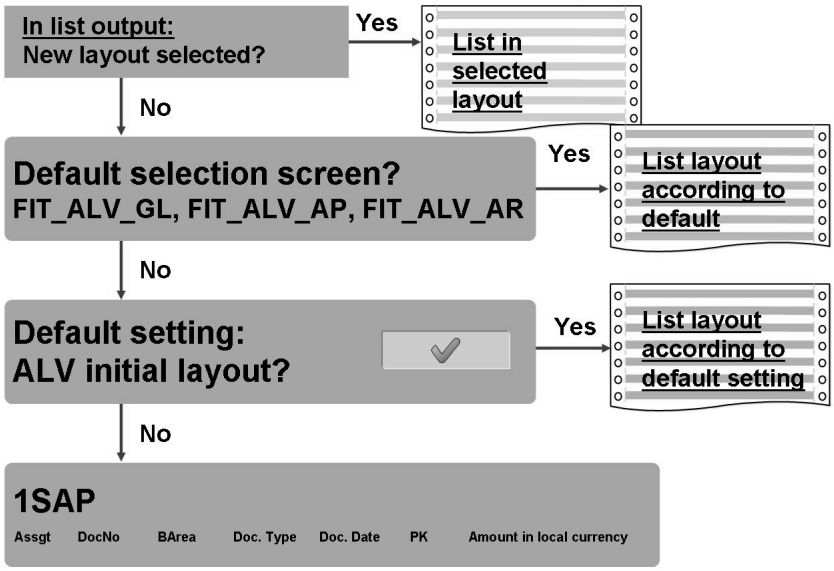


Figure 26: Standard Layout: Default and Initial Layout

The standard layout is the layout that **applies for all users**.

You can select a layout for the list output for your line item display. If you so require, this layout is displayed again the next time you call up transaction FBL*N (* = 1 for vendors, = 3 for G/L accounts, and = 5 for customers). In the accounting editing options in your user parameters, you can **save the last layout used as a default**. If you select the *Last layout entered for default* field, every time you execute the line item display, the layout on the selection screen is saved as the default in the user specifications. Tip: If you want to prevent the default being accidentally overwritten by the selection of another layout, leave the field blank.

If you have not selected a layout, the list layout from the **default selection screen** is selected from your user parameters. You can default the input field for each **account type**.

If you do not make an entry, and no default setting is made for the selection screen in the user parameters, the system uses the ALV initial layout. You cannot define the **ALV initial layout** in the accounting editing options; you can only do this in the line item list itself. You default the ALV initial layout in **display variant management**.

If you do not make a default setting in display variant management, the system chooses the **1SAP** layout.

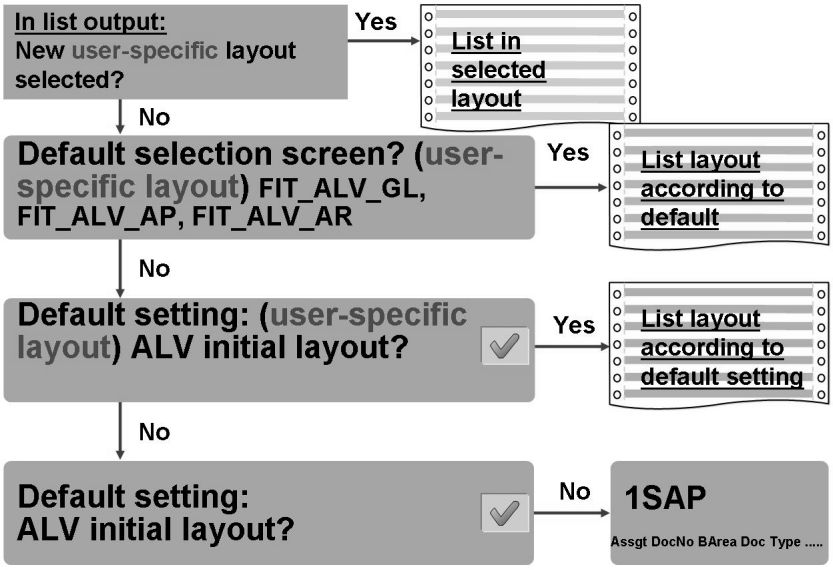


Figure 27: User-Specific Layout

You can create a **user-specific layout**, which only you can use.

If you only want to work with your user-specific layout, call up the relevant line item list with your new, user-specific layout. In the editing options of the user parameters, the default selection screen is updated with your new, user-specific layout. If you also want to be able to call up the line item list using another layout in your selection as well as your user-specific layout, deselect the *Save last layout for default* field.

The following order applies: User-specific initial screen (set as default) has priority over general initial variant (set as default).

Exercise 3: Changing the Screen Layout

Exercise Objectives

After completing this exercise, you will be able to:

- Change and save a screen layout
- Choose a layout

Business Example

When choosing a list, accountants can choose between different (standard and user-specific) layouts. They want to add to their own layouts.

Task 1:

Carry out the following task:

1. Call up the **open items list** for customer **1033** in company code **1000** again. Find display variant **AC280-D-##**. Select *Default setting* for your display variant and save it again. Which display variant does the system propose when you call up the open items list again?
2. In the **item texts** for the open items, you want to be able to see how the sales revenue was achieved. Change all the items using the **mass change function** so that the text *Flat screens* appears in the item text.

Task 2:

G/L account line item list

1. You are asked to look at all the **items** in the account **sales revenue for domestic products (800000)**. How many items are displayed?
2. To find the posting date, you have to first switch from the document item to the document header. However, you would prefer to find the information immediately when you **branch to the document**. What options do you have?
3. You have also been asked to create a list that shows only **totals for the profit centers posted to** and that displays the **amount in local currency**. When you analyze the subtotals for the line items, you want to see the **document date** and **document number**. You want all users to be able to use the display variant **AC280-PC-##** (## = your group number), with the description **Profit center ##**. Can you do this?
4. A user wants to see the **line items for profit center 1600**.
5. In addition to the G/L account with number, name, and the company code, in the **header item** of the list you also want to see the **account group** to which the account belongs.

Solution 3: Changing the Screen Layout

Task 1:

Carry out the following task:

1. Call up the **open items list** for customer **1033** in company code **1000** again. Find display variant **AC280-D-##**. Select *Default setting* for your display variant and save it again. Which display variant does the system propose when you call up the open items list again?

   a) By choosing *Settings →Choose display variant*

   Layout configuration → User-specific

   you can find your variant **AC280-D-##**.

   By choosing *Settings → Save Layout*

   you can save your variant **AC280-D-##**.

   The variant must remain user-specific. Select the default setting.

   Choose *Continue.*

   The system issues the following message: "**This layout already exists. Do you want to overwrite the existing layout?**"

   Choose ***Yes*** to confirm.

   The system issues the following message: "Layout was saved."

   Call up the open item list again: Variant **AC280-D-##** is displayed.

2. In the **item texts** for the open items, you want to be able to see how the sales revenue was achieved. Change all the items using the **mass change function** so that the text *Flat screens* appears in the item text.

   a) Mass change:

   Call up the open items list and choose *Edit → Select all..*

   Edit → Select all

   Environment → Mass change → New values (or choose Mass change).

   Choose *Enter.*

   List → Refresh.

Continued on next page

Task 2:

G/L account line item list

1. You are asked to look at all the **items** in the account **sales revenue for domestic products (800000)**. How many items are displayed?

   a) *Accounting → Financial Accounting → General Ledger → Account → Display/Change Line Items (New)*

   G/L account: 800000

   Company code:1000

   Item Selection: **All Items**

   Type: Ledger 0L

   Program → Execute

2. To find the posting date, you have to first switch from the document item to the document header. However, you would prefer to find the information immediately when you **branch to the document**. What options do you have?

   a) *Accounting → Financial Accounting → General Ledger → Environment → User Parameters → Editing Options*

   Tab page **Line Items**

   Item selection: *Go to .... Document Overview*

3. You have also been asked to create a list that shows only **totals for the profit centers posted to** and that displays the **amount in local currency**. When you analyze the subtotals for the line items, you want to see the **document date** and **document number**. You want all users to be able to use the display variant **AC280-PC-##** (## = your group number), with the description **Profit center ##**. Can you do this?

   a) Call up the line item list again.

   Settings → Layout → Current (or choose Select Layout)

   In the column set: Select all (Ctrl button + click)

   Arrow pointing right (hide selected fields)

   In the column set:

   - Profit center
   - Amount in local currency
   - Document date
   - Document no.

Continued on next page

Arrow pointing left (add selected fields) to add the fields to the column selection

Arrange them in this order (see above)

Sort order tab page

In the column set: Select all (Ctrl key + click)

Arrow pointing right (hide selected fields)

In the column set:

- Profit center

Arrow pointing left (add selected fields) to add the fields to the column selection

Choose *Sort ascending*

Choose *Subtotals*

Choose *Enter*

Settings → Summation Levels → Define Breakdown

Select level 1 (Profit center) (or * ...)

Settings → Layout → Save

Layout: **/AC280-PC-##**

Name: **Profit Center**

(* ... If you have not defined the breakdown by choosing *Settings → Summation levels → Define breakdown*, on the tab page, choose "Save with":

Select the sort order and subtotals

Breakdown to summation level: **1 *Profit Center**)

4. A user wants to see the **line items for profit center 1600**.

   a) Choose the icon for the subtotal. Select the * in the output to open up the line items for the selected profit center.

Continued on next page

5. In addition to the G/L account with number, name, and the company code, in the **header item** of the list you also want to see the **account group** to which the account belongs.

   a) List header:

      Settings → Layout → Current Heading

      Insert → Characteristics (or choose *Characteristics*)

      Variable category: Character-Related Text Variable

      Characteristic: **Account Group**

      Text type: **Name**

      Value type: **Single Value**

      Format: **Select Intense, width 25**

      Insert → Characteristics (or choose *Characteristics*)

      Variable category: **Character-Related Text Variable**

      Characteristic: **Account Group**

      Text type: **Value**

      Value type: **Single Value**

      Format: **Width 4**

      Save

Lesson Summary

You should now be able to:

- Change standard and user-specific screen layouts

Unit Summary

You should now be able to:

- Explain the concept SAP List Viewer
- Use the functions of the SAP List Viewer
- Use selection criteria for accounts in which you want to find line items in specific company codes
- Choose selection criteria using search help
- Choose line items based on their status and category
- Change standard and user-specific screen layouts

Unit 3

AR/AP Information System

Unit Overview

Employees in Accounts Receivable Accounting want to be able to evaluate selected data records for customers and vendors without having to execute reports online.

Unit Objectives

After completing this unit, you will be able to:

- Explain how the accounts receivable/accounts payable information system works
- Name the various options for customizing the accounts receivable/accounts payable information system and explain the effect of these options on evaluations
- Create evaluations in the information system
- Use various options to display evaluations and navigate within the tree structure of the accounts receivable/accounts payable information system

Unit Contents

Lesson: The AR/AP Information System

Lesson Overview

The **accounts receivable (AR)/accounts payable (AP) information system** is an information system for analyzing important customer and vendor business data. Accounting is the primary data basis for this information system.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain how the accounts receivable/accounts payable information system works

Business Example

The accounts receivable and accounts payable departments have requested additional reports for their area. In particular, they want to be able to analyze combinations of variables, such as company, business area, credit control area, and so on.

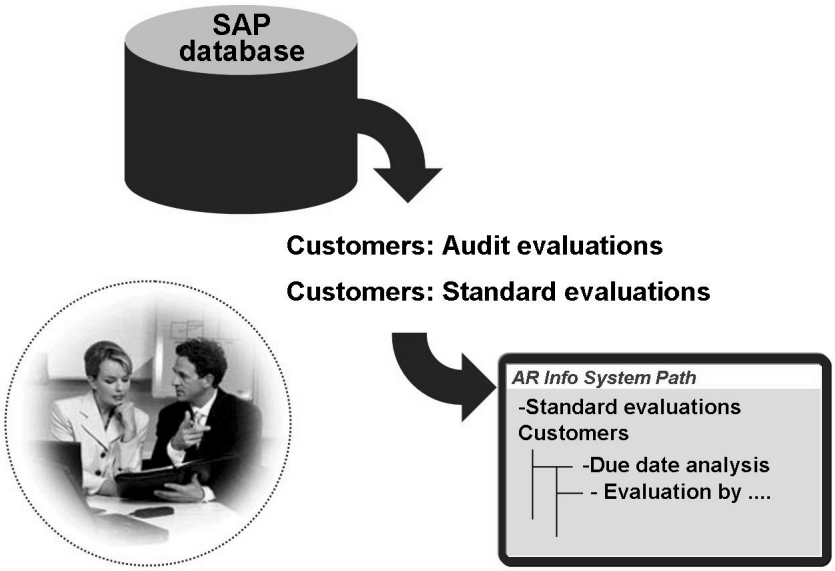


Figure 28: The A/R Information System

The **accounts receivable (AR)/accounts payable (AP) information system** is an information system for analyzing important customer and vendor business data. Accounting is the primary data basis for this information system. The aim of the AP/AR information system is to enable you to analyze an **extensive database** online, and to display the information in an overview tree structure on the screen.

You can access the analyses using the AR and AP reporting trees. The AP/AR information system provides special types of analyses, including: These include analyses of:

- Due date structure
- Payment history
- Currency risk
- Overdue items
- DSO analysis (how many days' sales the customer owes my company)
- The customer's cash discount history (days agreed/actual days)

The above-mentioned analyses are based on preselected datasets (evaluation views, represented in figure 33 by the two cubes: *Customers: Audit evaluations* and *Customers: Standard evaluations*) that are regularly created or updated by jobs from the SAP database. Using the AP/AR information system, you can execute analyses for specific business areas as often as you wish. If you need current data every morning, you can schedule jobs to run during the night.

The AP/AR information system provides an extensive combination of variables and a classification of reports by document.

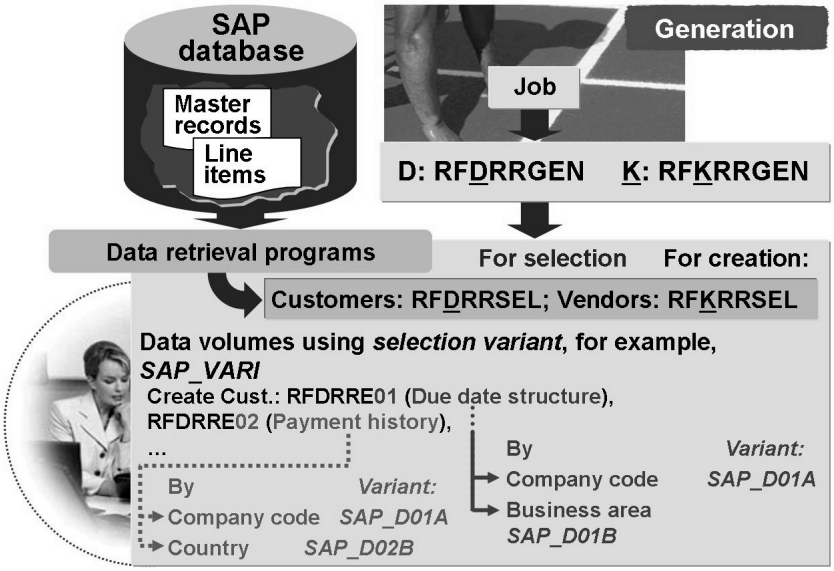


Figure 29: Evaluations - Multilevel Process: Selection

Firstly, the **data retrieval report** (**RFDRRSEL** or **RFKRRSEL**) collects selected data from the SAP database using a **selection variant** (data retrieval variant). For example, it collects from a specific area data for customers/vendors in specific company codes. The data is passed on to all of the evaluations defined that belong to the **evaluation view** and that are defined for regeneration.

Additional reports (**RFDDRRE01, RFDRRE02** or **RFKRRE01, RFKKRE02**) create the evaluations. For example, RFDRRE01 creates the due date structure of the open customer items. You cannot start these reports online or in a batch session, since the required data records are supplied by the data retrieval report (RFDRRSEL, RFKRRSEL).

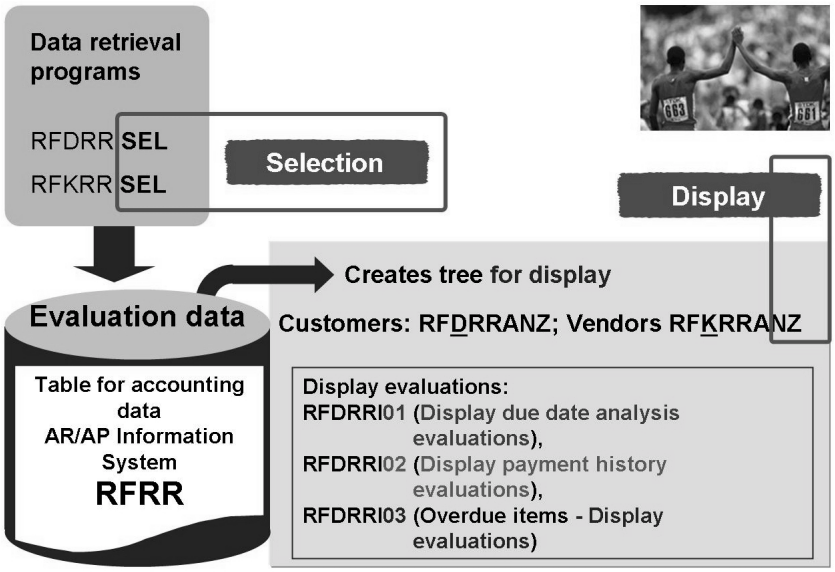


Figure 30: Evaluations - Multilevel Process: Display

The system does not display the results of the reports (**RFDRRE01, RFDRRE02**, or **RFKRRE01, RFKKRE02**,) in a list, but saves them in table **RFRR** to be displayed later. The **data retrieval report** (**RFDRRSEL** or **RFKRRSEL**) provides the data records required to do this.

The system continues to process this data, and the display reports send the results to the screen.

RFDRRANZ and **RFKRRANZ** create the report trees that are used to display the evaluations in the accounts receivable/accounts payable information system. Since you do not make selections yourself, these reports do not have any selection fields or selection variants.

Exercise 4: The AR/AP Information System

Exercise Objectives

After completing this exercise, you will be able to:

- Create evaluations in the information system
- Describe various display options for evaluations
- Navigate in the tree structure of the AR/AP information system and adjust this to your needs

Business Example

Managers in accounts receivable want better reporting functions. In particular, they want to be able to analyze combinations of different variables (for example, company code, business area, and credit control area). In addition, they want to be able to drill down from the totals levels to the detail levels of individual documents.

You need to demonstrate that these reporting functions are provided by the accounts receivable information system, which accesses predefined datasets.

Task:

Due date analysis with the Accounts Receivable Information System

Using the accounts receivable information system, display a **due date analysis by business area** for **company code 1000**. Use the evaluation view *Standard Customer Evaluations*. When you display the evaluation, switch on the *Day/Time*.

1. What is the **total for all the due items** in your **business area, BA##** (## = your group number)?

   _____

2. What is the total for **all the open items** in your **business area BA##**? (If you want to see the key instead of the name, you can change the characteristic display with the settings).

   _____

3. In what time interval are the items that are not yet due?

   _____

4. Which **customers in your business area BA##** (## = your group number) **still have liabilities**?

   _____

5. Which of the customers is a foreign customer and how many days ago were this customer's items due?

   _____

Solution 4: The AR/AP Information System

Task:

Due date analysis with the Accounts Receivable Information System

Using the accounts receivable information system, display a **due date analysis by business area** for **company code 1000**. Use the evaluation view *Standard Customer Evaluations*. When you display the evaluation, switch on the *Day/Time*.

1. What is the **total for all the due items** in your **business area, BA##** (## = your group number)?

   _____

   a) **Due date analysis using the Accounts Receivable Information System SAP menu:**

      Accounting → Financial Accounting → Accounts Receivable → Information System → Tools → Display Evaluations

      Choose *Customer standard evaluations → Due date analysis → Evaluation by business area → For company code: 1000 IDES AG*

      or Choose the *Switch path* pushbutton, and then choose *Customer standard evaluations → For business area → BA## (## = your group number) → Due date analysis → By company code* (click) search for 1000 IDES AG.

      Choose *Extras → Day/Time on/off*.

   b) **Place the cursor on the *Business area* column**.

      Choose *Setting → Change*. Then choose characteristic display *key*. Now you can see BA## (## = your group number), second column: Due items

2. What is the total for **all the open items** in your **business area BA##**? (If you want to see the key instead of the name, you can change the characteristic display with the settings).

   _____

   a) **Last column: Total OIs**

3. In what time interval are the items that are not yet due?

   _____

   a) Choose *View → Open items not due* **(or choose the *Open items not due* button)**.

Continued on next page

4. Which **customers in your business area BA##** (## = your group number) **still have liabilities**?

   _____

   a) **Place the cursor on your business area BA## (## = your group number).**

      Choose *View* → *Top N customers by* → *Total OIs* (or double-click your business area, BA##)

5. Which of the customers is a foreign customer and how many days ago were this customer's items due?

   _____

   a) **Place the cursor on the foreign customer.**

      Choose *View* → *OI due*.

      Choose *View* → *Line item analysis*.

Lesson Summary

You should now be able to:

- Explain how the accounts receivable/accounts payable information system works

Lesson: Customizing the AR/AP Information System

Lesson Overview

In this lesson, we will discuss evaluation views, evaluation types, and evaluation versions.

Lesson Objectives

After completing this lesson, you will be able to:

- Name the various options for customizing the accounts receivable/accounts payable information system and explain the effect of these options on evaluations

Business Example

The accounts receivable and accounts payable departments have requested additional reports for their area. In particular, they want to be able to analyze combinations of variables, such as company, business area, credit control area, and so on. You now have the task of fulfilling these requirements in Customizing for the accounts receivable/accounts payable information system.

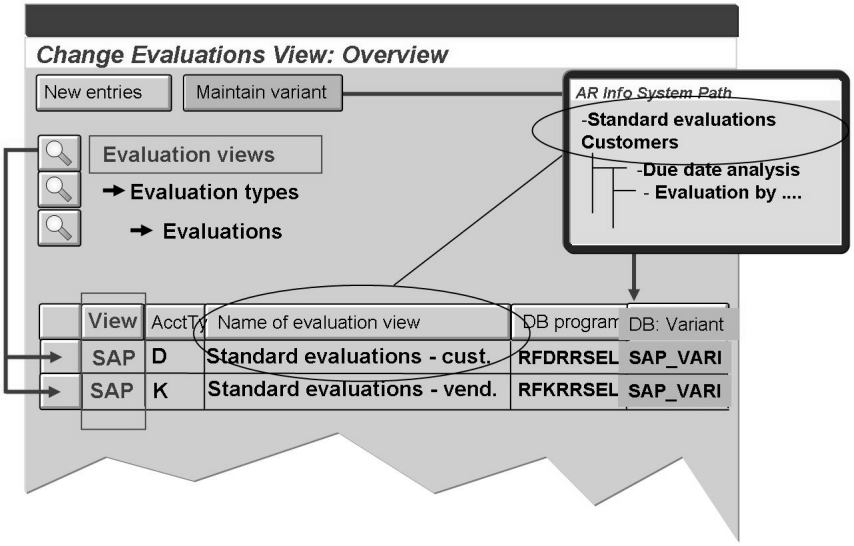


Figure 31: Evaluation Views

Each table entry at the highest level of the **evaluation view** automatically creates a separate node in the standard report tree. You use the **evaluation views** to create evaluations from different **perspectives** and to organize them according to your

needs. If your company has multiple **company codes, business areas, credit control areas, and so on**, you can use the corresponding number of **evaluation views** to create separate evaluations for these.

Using the **selection variants** for the **data retrieval program** (**RFDRRSEL** or **RFKRRSEL**) that you maintain here, you define for each **evaluation view** the (maximum) data volume that is available to the display programs.

Example for a customer evaluation:

You make three entries: one for company code Europe, one for company code USA, and a third for both company codes. When you make these settings, the system automatically creates three **nodes** in the accounts receivable information system. You then set up the variants for the data retrieval program (in our example, RFDRRSEL) such that the corresponding company codes are included in the three different variants of the data retrieval program.

Hint: It is easier to make the settings by copying existing entries than to create new entries. When you copy existing entries, the system copies the complete table hierarchy of the source entry to the target entry.

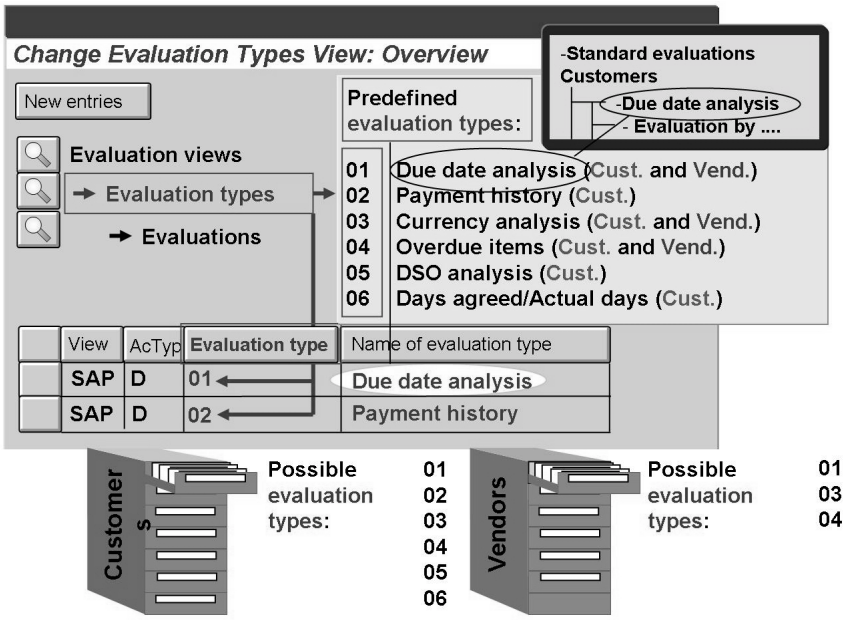


Figure 32: Evaluation Types

Depending on the **account type** you select, you can choose from various predefined **evaluation types** in the system.

The **evaluation type** specifies the type of evaluation (due date analysis, payment history, and so on) within an **evaluation view**. You can also define your own reports for creating and displaying the evaluations for the evaluation type.

If you have copied an entry on the previous level (in the evaluation view), on this level you will see all the evaluation types that belong to the source entry. Delete the entries that you do not need.

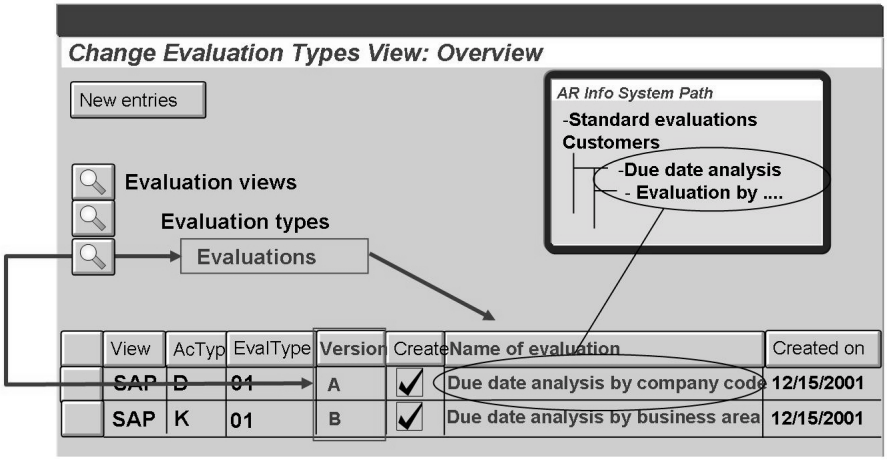


Figure 33: Evaluation Versions

At the lowest level of the table entries, you can also create your own evaluation versions in addition to the evaluation versions delivered. Each entry uses a different variant of the creation report, which is part of the data retrieval.

To view a definition of the selection report variant (RFDRRE01,02,03,04,05), double-click a standard entry.

The **evaluation versions** within an **evaluation type** differentiate between the evaluations according to a **grouping criterion** that you select. For example, evaluations for the due date analysis could be grouped in **version *A* according to company code**, and in **version *B* according to business area**.

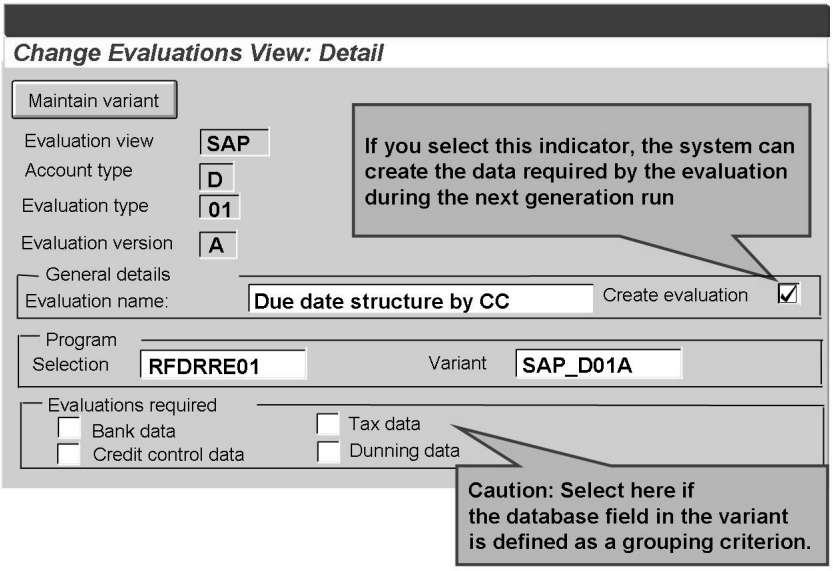


Figure 34: Evaluations

If you activate the *Create evaluation* checkbox, the system creates the data during the next **generation run**. You can make this specification in Customizing or in the application.

You have to activate the checkboxes in the *Evaluations required* area if you want to define one of these database fields as a grouping criterion (variant configuration).

You have to do this because the program does not read the values from the following database fields unless prompted to do so:

KNA1-KNAS (VAT registration number, tax data)

KNA1-KNKA and KNA1-KNKK (credit control data, credit control area data)

KNA1-KNBK (bank data)

KNB1-KNB5 (customer's dunning master data)

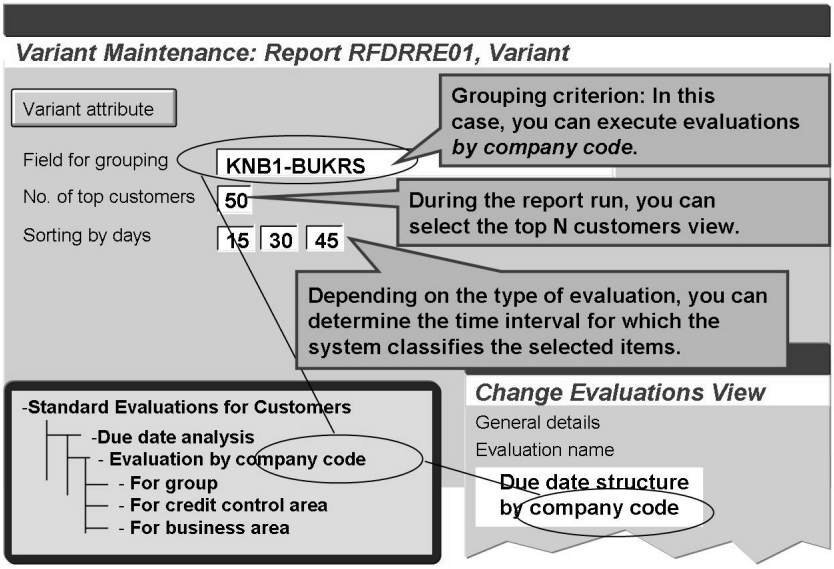


Figure 35: Variant Maintenance for Selection Report

You enter the **database field** to be used to group the evaluation on this screen. For the evaluation *Due date structure by company code*, you have to enter the database field *KNB1-BUKRS* (see example on figure 40).

In the *Number of Top Customers* field, specify how many accounts or documents are to be included in the ranked list for this evaluation.

Using the parameters for **sorting by number of days**, you can enter day intervals for sorting the selected items (for example, for the due/not due items). The system would generate a sorted list using entries 15, 30, and 45:

- 0 – 15
- 16 - 30
- 31 – 45
- > 45

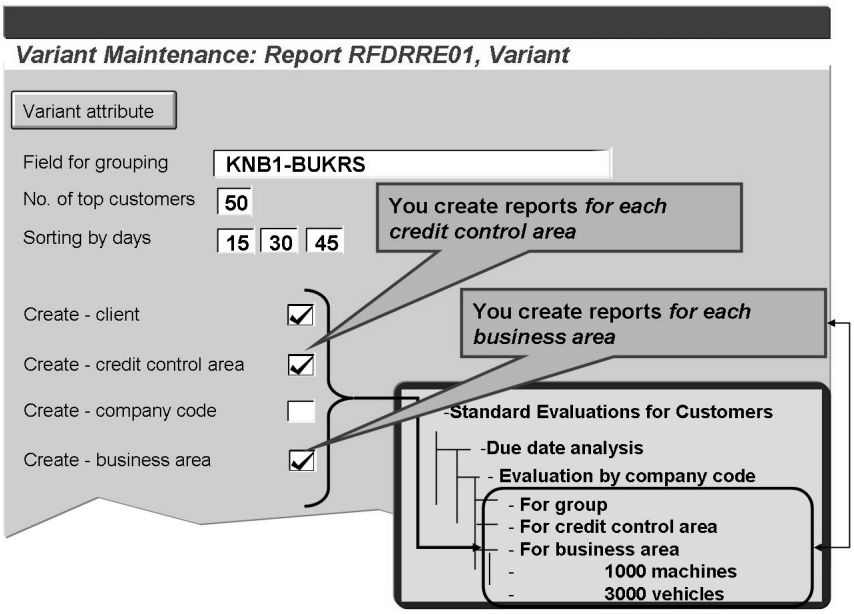


Figure 36: Additional Variant Attributes

When you activate the parameters, the system creates evaluations on various levels:

- **Client**
- **Credit control area**
- **Company code**
- **Business area**

Exercise 5: Customizing the AR/AP Information System

Exercise Objectives

After completing this exercise, you will be able to:

- Customize the accounts receivable/accounts payable information system

Business Example

Managers in accounts receivable want better reporting functions. In particular, they want to be able to analyze combinations of different variables (for example, company code, business area, and credit control area). In addition, they want to be able to drill down from the totals levels to the detail levels of individual documents.

You have to show that these reporting functions are provided in Customizing for the accounts receivable information system, which accesses predefined datasets.

Task 1:

Analysis of overdue items with the accounts receivable information system

1. In Customizing, create your own evaluation view, **GR##**, and your own selection variant, **GR##VARI**, so that you can subsequently produce and execute your own evaluation view.

2. Create the new **evaluation view**.

   Enter the name **GR##** (## = your group number) for your **evaluation view**, and

   enter **Customer evaluations GR## (## = your group number)** as the description.

   Copy the existing entry **SAP evaluation view for account type D, standard customer evaluations** from the table with the evaluation views.

   Hint: It is easier to copy an entry than to create a new entry and maintain it individually. Therefore, use the entry **SAP, D, Standard customer evaluation** as a reference.

3. Create the **data retrieval selection variant**.

   For the **data retrieval report RFDRRSEL**, create your own **data retrieval selection variant, GR##VARI** (## = your group number) for your **evaluation view GR##** (## = your group number).

Continued on next page

In this variant, choose the customers **Customer01 to Customer20 and Foreign01 to Foreign20** in **company code 1000**.

Name your variant **Group ## variant** (## = your group number).

For the **open item selection**, choose a **selection variable** that ensures that the system performs a **dynamic date calculation** with the **current date**.

Task 2:

Your company is currently investigating in which cities late payers are located so that it can use a collection agency to collect the receivables.

1. Use the *Customer evaluations GR##* evaluation view (## = your group number), which you created in the previous step. In evaluation view **GR##** (## = your group number), create an **evaluation version** for the evaluation type *Overdue Items*. In the evaluation version, you must be able to find the items due by the **cities** in which the late payers are located. This evaluation version is called **version g** and has the description *Overdue items by city*. In the evaluation version's selection variant *Cityvari##* (## = your group number) (description: city variant) for the **selection report RFDRRE04**, the **city is the field used to group items (field KNA1-ORT01).**

Solution 5: Customizing the AR/AP Information System

Task 1:

Analysis of overdue items with the accounts receivable information system

1. In Customizing, create your own evaluation view, **GR##**, and your own selection variant, **GR##VARI**, so that you can subsequently produce and execute your own evaluation view.

   a) From the SAP Reference IMG, choose ***Financial Accounting (New) → Accounts Receivable and Accounts Payable → Information System → Accounts Receivable → Standard Evaluations → Select Standard Evaluations***.

   b) Create a new **evaluation view GR##** (## = your group number) and a **selection variant GR##VARI** (## = your group number) for the data retrieval report **RFDRRSEL**.

2. Create the new **evaluation view**.

   Enter the name **GR##** (## = your group number) for your **evaluation view**, and

   enter **Customer evaluations GR## (## = your group number)** as the description.

Continued on next page

Copy the existing entry **SAP evaluation view for account type D, standard customer evaluations** from the table with the evaluation views.

Hint: It is easier to copy an entry than to create a new entry and maintain it individually. Therefore, use the entry **SAP, D, Standard customer evaluation** as a reference.

a) Evaluation view: GR## (## = your group number)

Select the entry:

Evaluation view: **SAP** (Customer standard evaluations)

Account type: **D**

Data retrieval report: **RFDRRSEL**

Data retrieval variant: SAP_VARI

Edit → *Copy* as (or *Copy as* pushbutton)

Evaluation view: **GR##** (## = your group number)

Account type: **D**

Name of evaluation view: **Customer evaluation GR##**

Enter

Dialog box *Specify objects to be copied*: **Select Copy all**

Confirm the information about the *Number of copied entries: 45* by choosing *Enter*

Save

3. Create the **data retrieval selection variant**.

For the **data retrieval report RFDRRSEL**, create your own **data retrieval selection variant, GR##VARI** (## = your group number) for your **evaluation view GR##** (## = your group number).

In this variant, choose the customers **Customer01 to Customer20 and Foreign01 to Foreign20** in **company code 1000**.

Name your variant **Group ## variant** (## = your group number).

For the **open item selection**, choose a **selection variable** that ensures that the system performs a **dynamic date calculation** with the **current date**.

a) Data retrieval selection variant *GR##VARI* (## = your group number) for your evaluation view *GR##* (## = your group number)

Select

Continued on next page

Evaluation view: **GR##** (## = your group number)

Account type: **D**

Name of evaluation view: **Customer evaluation GR##**

→ *Environment* → *Maintain variant* (or *Maintain variant* pushbutton)

Variant: **GR##VARI** (## = your group number)

Variants → *Create* (or choose the *Create* pushbutton)

For customer account: **Multiple selection** button (right):

Choose the **Ranges** tab page

In the first range: **Customer00** to **Customer20**

In the second range: **Foreign00** to **Foreign20**

Copy

Enter

Execute

Company code: **1000**

Edit → *Attribute* (or choose the *Attributes* button)

Description: **Variant group ##** (## = your group number)

Choose the *Selection Variable* pushbutton for the object of the selection screen "**Open Items at Key Date**" and choose *Type of Variable*:

Choose the *Name der Variable* pushbutton (entries only possible using input help)

Choose ***Current Date***

Save (to save the variant GR##VARI)

Go back twice (green arrow).

Enter the following:

Evaluation view: **GR##** (## = your group number)

Account type: **D**

Name of evaluation view: *Customer evaluation GR##*

Your variant: **GR##VARI** (## = your group number)

Save

Continued on next page

Task 2:

Your company is currently investigating in which cities late payers are located so that it can use a collection agency to collect the receivables.

1. Use the *Customer evaluations GR##* evaluation view (## = your group number), which you created in the previous step. In evaluation view **GR##** (## = your group number), create an **evaluation version** for the evaluation type *Overdue Items*. In the evaluation version, you must be able to find the items due by the **cities** in which the late payers are located. This evaluation version is called **version g** and has the description *Overdue items by city*. In the evaluation version's selection variant *Cityvari##* (## = your group number) (description: city variant) for the **selection report RFDRRE04**, the **city is the field used to group items (field KNA1-ORT01).**

   a) New evaluation by city for the *Overdue items* evaluation type:

      Select the evaluation view that you previously created

      Evaluation view: **GR##** (## = your group number)

      Account type: **D**

      Name of evaluation view: **Customer evaluation GR##**

      DB: Variant **GR##VARI** (## = your group number)

      Double click *Evaluation Types* (in dialog structure)

      Select the evaluation type: **04**; name: "**Overdue items**"

      Double click *Evaluations* (in dialog structure)

      Select the evaluation *Overdue items by company code*

      Edit → *Copy as* (or *Copy* button)

      Evaluation view: **GR##** (## = your group number)

      Account type: **D**

      Evaluation type: **04** (Overdue items)

      Evaluation version: **G**

      Evaluation name: **Overdue items by city**

      Create evaluation: **Select**

      For selection:

      Selection variant: **Cityvari##** (## = your group number)

      ENTER

      The following message appears:

Continued on next page

Variant RFDRRE04 CITYVARI## does not exist. Please create.

Button: *Maintain variant*

Program: **RFDRRE04**

Variant: **Cityvari##**

Variant → Create

Field for grouping: **KNA1-ORT01**

Edit → Attributes

Description: **City variant**

Save and choose the green arrow to go back to the previous screen.

Do not forget to *SAVE* the new evaluation.

Lesson Summary

You should now be able to:

- Name the various options for customizing the accounts receivable/accounts payable information system and explain the effect of these options on evaluations

Lesson: Creating and Displaying Evaluations

Lesson Overview

Evaluations are performed and displayed. In this lesson, you will learn to create evaluations in the information system, and navigate within reports using the appropriate list functions.

Lesson Objectives

After completing this lesson, you will be able to:

- Create evaluations in the information system
- Use various options to display evaluations and navigate within the tree structure of the accounts receivable/accounts payable information system

Business Example

The accounts receivable and accounts payable departments have requested additional reports for their area. In particular, they want to be able to analyze combinations of variables, such as company, business area, credit control area, and so on.

You need to demonstrate that these functions can be performed by creating and navigating within a dataset in the accounts receivable/accounts payable information system.

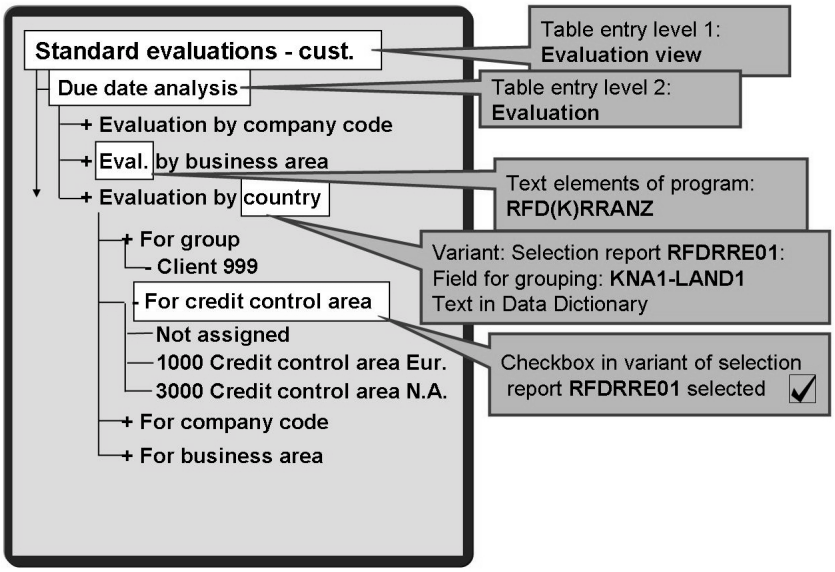


Figure 37: Report Tree

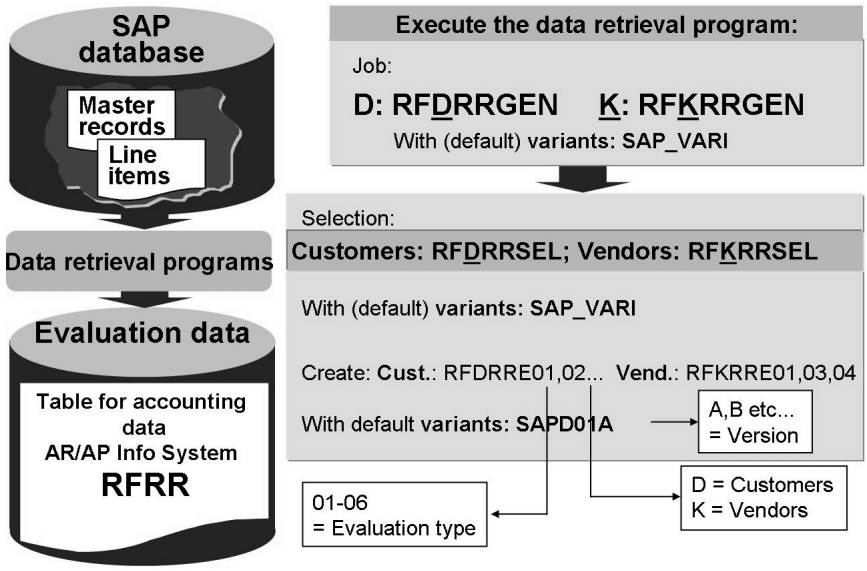


Figure 38: Creating Evaluations

To create an evaluation, the system analyzes the master data and the line items of the customer and vendor accounts. This process can be very time-consuming for large volumes of data. You therefore perform evaluations as a **background job**. You can use the **Job Wizard** to do this.

You can run background processing at specific times. For example, you can perform a specific evaluation run daily, weekly, or monthly.

Note that evaluations can only be as up to date as the last data retrieval. If you have carried out activities since the last data retrieval, then the current customer or vendor information may not correspond with the evaluation.

You can change the data volume using the relevant report variants.

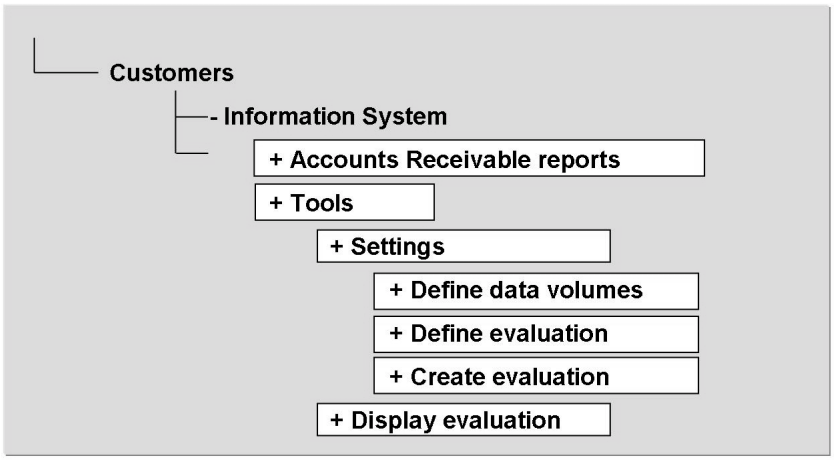


Figure 39: Displaying Evaluation Results

Access the accounts receivable (or accounts payable) information system through the central accounts receivable (or accounts payable) tree.

If you have not done so already, define the **data volume** for your accounts receivable/accounts payable information system.

Then select which **evaluations** you want to have **created**.

In the next step, you define a **job** with which the system will create your **evaluation**.

You can then display the evaluation. Navigate through the **tree structure** of the AP/AR information system until you find the required evaluations.

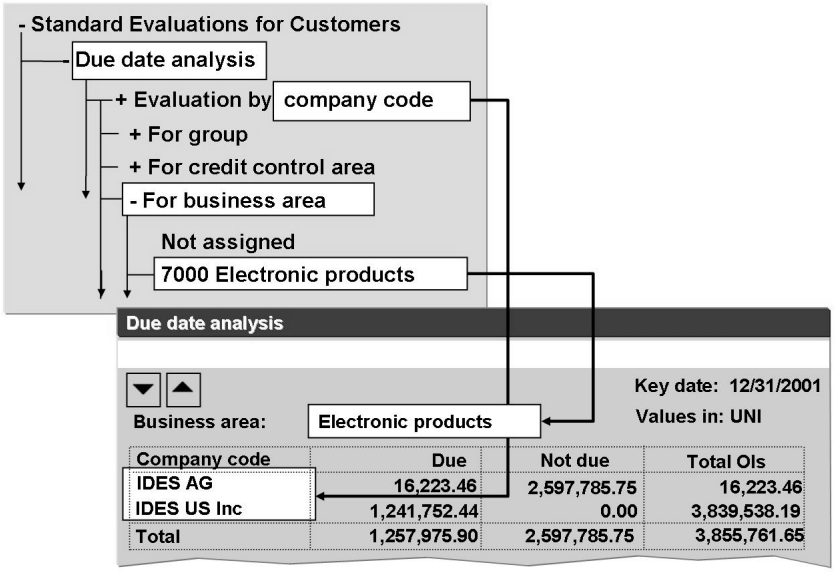


Figure 40: Standard Evaluations

Standard evaluations are delivered with the accounts receivable/accounts payable information system. You can copy them into a client system in the IMG.

The evaluations provided are combinations of:

- **Evaluation views** (for example, standard evaluations for customers)
- **Evaluation types** (for example, due date analysis)
- **Evaluation versions** (an *evaluation by* criterion; for example, by company code)
- Creation parameters (a *create evaluation for* criterion; for example, for a business area)

An evaluation reflects an **evaluation type** for a representative of the *for* criterion, whereby the data is further classified with regard to the *by* criterion.

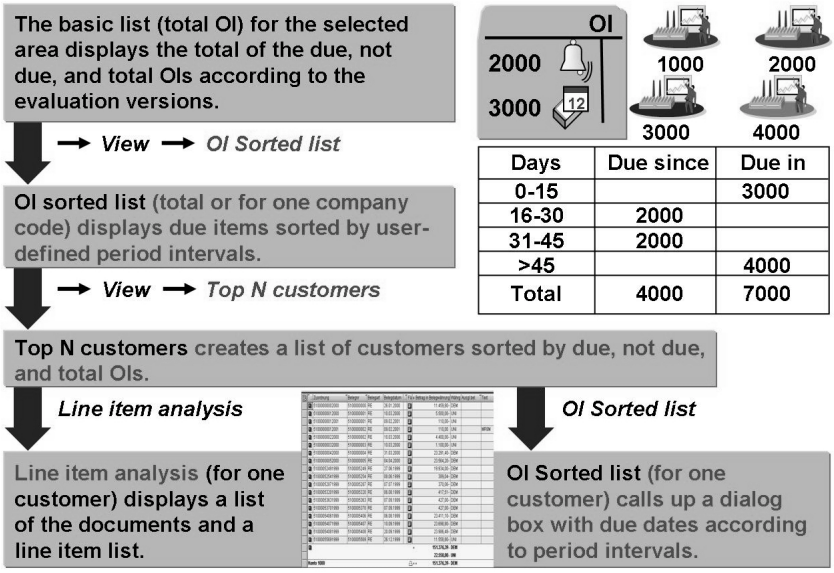


Figure 41: Due Date Analysis

The *due date analysis* evaluation type is available **for customers and vendors**.

The open items at a key date are taken into account in the due date analysis. The item amounts are summarized according to the **due** and **not due** criteria. For these values, you can display a **sorted list** according to the **due since** and **due in** criteria.

The following applies to all evaluations: If you break down the data by line item (call up the line item list), you are accessing current database information that may be different from the total shown in the previous run of the data retrieval program.

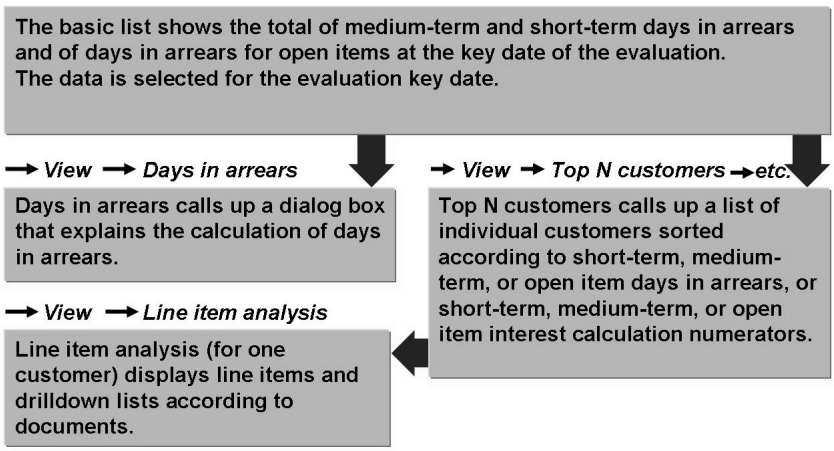


Figure 42: Payment History

This evaluation is only available **for customers**.

When considering the payment history, the system takes into account the **short- and medium-term payment history** and the current situation based on the **open items due**. For each of these periods, the system calculates the number of **days in arrears**, the **amounts**, and the **interest calculation numerators**.

Country	Medium-term days in arrears	Short-term days in arrears	Open item days in arrears
Germany	11	17	568
USA	-5	-5	1412
...			
Total			

The basic list shows the total of medium-term and short-term days in arrears and of days in arrears for open items at the key date of the evaluation. The data is selected for the evaluation key date.

$$\text{Days in arrears} = \frac{\text{Total interest calculation numerators} * 100}{\text{Clearing volume}}$$

Figure 43: Payment History: Days in Arrears by Country

This is based on the updated payment history. This includes the **clearing volume** and **the average number of days in arrears**, split by payments with and without cash discount.

To determine the **medium-term days in arrears**, the program uses the **values of the last three posting periods** (for the **short-term days in arrears, the values of the last posting period**) in which payment transactions took place.

Calculation is based on the **total interest calculation numerators** and the **total payment amount**. The advantage of this is that when you **summarize the average days in arrears**, the system also includes information about the **payment volumes concerned**.

Period	Clearing volumes with cash disc.	Average days in arrears	Clearing volumes w/o cash disc.	Average days in arrears
01	100000	2	200000	5
02	0	0	50000	2
03	0	0	150000	-2

Calculation of interest calc. num.

$$\text{Int. calc. num.} = \frac{\text{Amount} * \text{days in arrears}}{100}$$

$$\frac{100000 * 2}{100} = 2000 \qquad \frac{200000 * 5}{100} = 10000$$

$$\ldots = 0 \qquad \frac{50000 * 2}{100} = 1000$$

$$\ldots = 0 \qquad \frac{150000 * (-2)}{100} = -3000$$

Total amounts and interest calculation numerators

Amounts = 100000 + 200000 + 50000 + 150000 = 500000

Interest calc. numerators = 2000 + 10000 + 1000 – 3000 = 10000

$$\text{with days in arrears} = \frac{\text{Total int. calc. num.} * 100}{\text{Clearing volume}}$$

$$\text{Med.-term days in arrears} = \frac{10000 * 100}{500000} = 2$$

Figure 44: A Customer's Payment History

To determine the medium-term interest amount, the program uses the values of the last three posting periods (for the short-term interest amount, the values of the last posting period) in which payment transactions took place. The interest calculation numerators are firstly determined for each period. The average value is displayed.

The **interest calculation numerator** is a quantity in which two items of information are put together: the **duration of the arrears** and the **amount concerned**. The **days in arrears** are weighted with the **relevant payment volumes** (or vice versa). The interest calculation numerator provides better **information about the extent of payment arrears** than the amount or the duration of arrears by themselves.

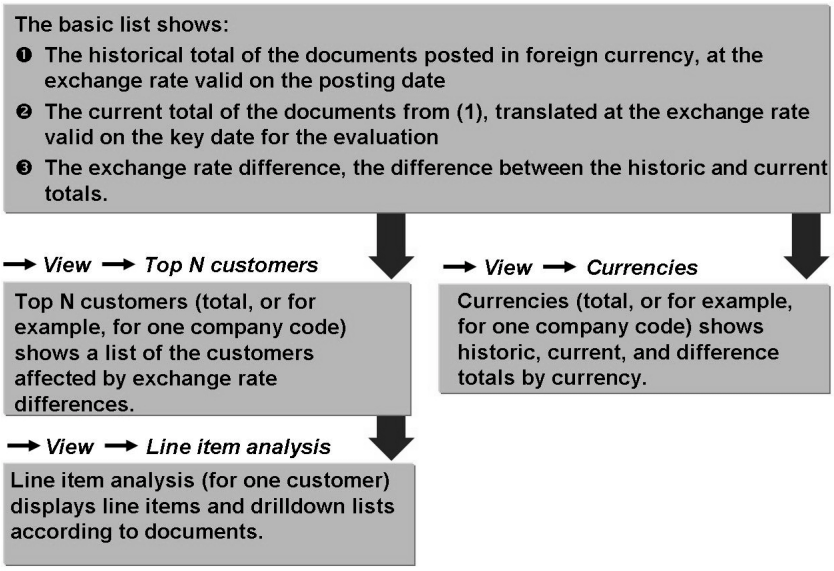


Figure 45: Currency Analysis

The currency analysis evaluation is available for **customers and vendors**.

Business area	Historic total	Current total	Exch. rate diff. to curr.
Electronic products	456,342	457,209	867
Vehicles	187,916	238,452	50536
...			
Total			

The list shows:

❶ Total of documents posted in foreign currency at the historical exchange rate, that is, the exchange rate saved in the document. It contains the items open at the key date displayed. The display is in the currency displayed in the header item.

❶ Foreign currency total (current exchange rate); Total of documents posted in foreign currency at the current exchange rate, that is, the exchange rate valid on the key date.

❶ The exchange rate difference, the difference between the historic and current totals.

Figure 46: Currency Analysis by Business Area

The currency analysis by business area shows:

- The total number of **documents posted in foreign currency** at the **historical** exchange rate, that is, the **exchange rate saved in the document**. It contains the items open at the key date displayed. The display is in the currency shown in the header item.
- The **total foreign currency at the current exchange rate**; total for the documents posted in foreign currency at the current exchange rate (that is, the exchange rate valid on the key date.)
- The **exchange rate difference**: the difference between the historic and current totals.

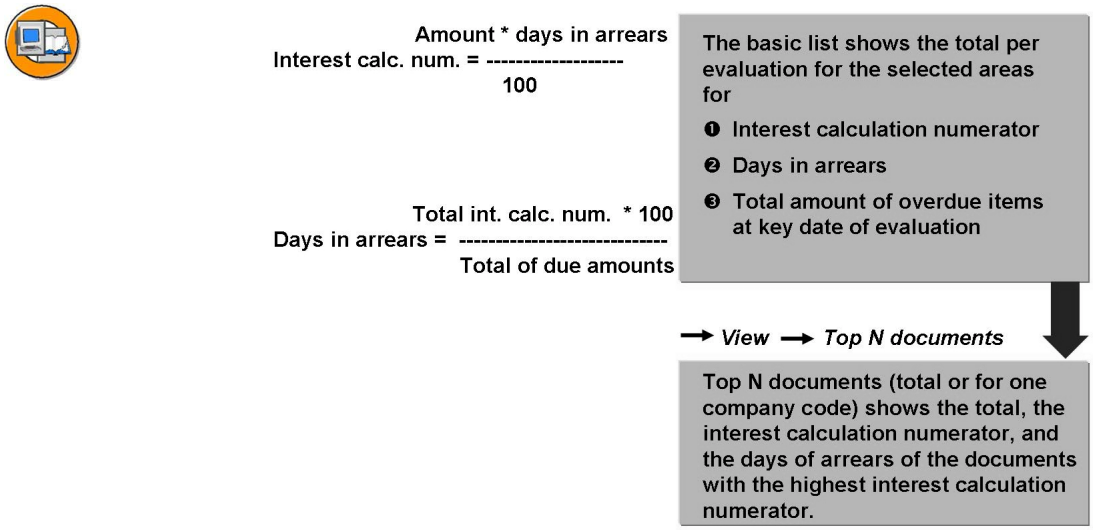


Figure 47: Overdue Items

The overdue items evaluation is available for **customers and vendors**.

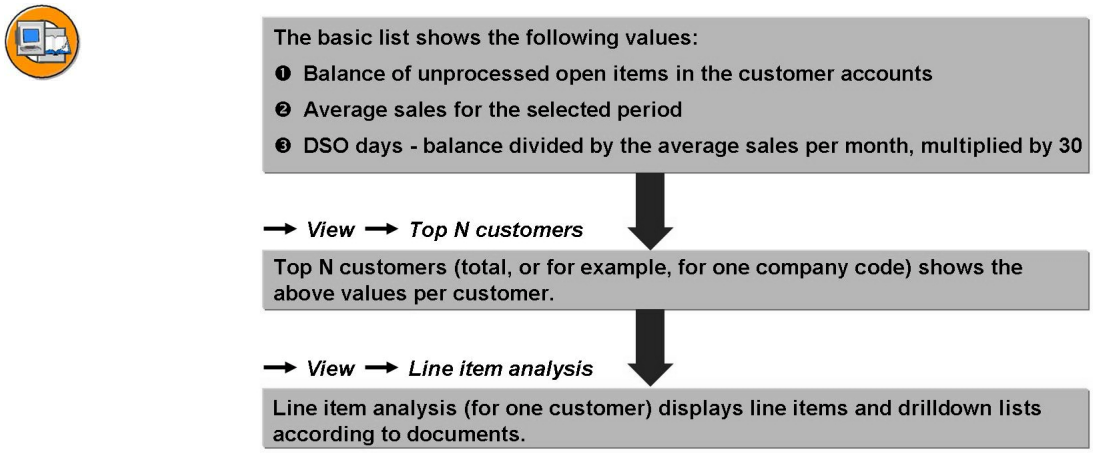


Figure 48: DSO Analysis

The DSO (Days Sales Outstanding) evaluation is **only** available **for customers**.

Balance

Calculated from the calculation type of the DSO days
Example: n = 3, key date =12/15/2002
==========
Calculation type 1:

Period	closing balance
01/2002	9,000
12/2001	5,000
11/2001	1,000

Average balance = (9,000 + 5,000 + 1,000)/3 = 5,000

You can define the variable n and the key date when you create the evaluation.

Calculation type 2:

If the key date is in a period that has not yet been closed, the balance displayed is the current balance.
If the key date is in a period that has been closed, the balance displayed is the closing balance of this period.

The basic list shows the following values:

❶ Balance of open items in the customer accounts

❷ Average sales for the selected period

❸ DSO days - balance divided by the average sales per month, multiplied by 30

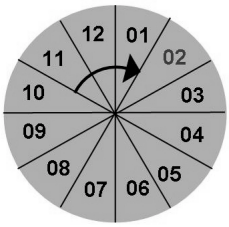


Figure 49: DSO Analysis: Balance

The *Use Periods* parameter in the variant maintenance function for report RFDRRE05 determines how many periods are used to calculate the DSO. If you enter `3`, this means that the last three closed periods are used.

You can define the calculation type in the selection variant of this report:

- **Calculation type 1 for DSO days**: The balance displayed is the average period closing balance of the last n closed periods. The last n closed periods refer to the key date displayed in the header item (see example in figure 54).
- **Calculation type 2 for DSO days**: If the key date is within a period that has not been closed, the balance displayed is the current balance. However, if the key date is within a closed period, the balance displayed is the closing balance of this period.

Total sales

The sales figure displayed is the average sales of the last n closed periods.
The last n closed periods refer to the key date displayed in the header item.

Example: n = 3, key date = 02/01/2002

Period	Sales
01/2002	8,000
12/2001	1,000
11/2001	6,000

Average sales = (8,000+1,000+6,000) / 3 = 5,000

The basic list shows the following values per company code:

1. Balance of open items in the customer accounts
2. Average sales for the selected period
3. DSO days - balance divided by the average sales per month, multiplied by 30

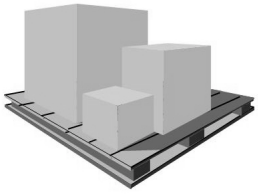


Figure 50: DSO Analysis: Sales

Days Sales Outstanding

Calculation type 1:
Average balance/sales from one day
Relationship of average balance of n closed periods to the sales from one day (average sales of corresponding n periods) gives:

$$DSO = \frac{\text{Average balance}}{\text{Day's sales}} = \frac{\text{Average balance}}{\text{Average sales of n periods}} * 30$$

The basic list shows the following values per company code:

1. Balance of open items in the customer accounts
2. Average sales for the selected period
3. DSO days - balance divided by the average sales per month, multiplied by 30

Calculation type 2:
Average balance/sales from one day
Relationship of current balance to sales from one day (average of n periods) gives:

$$DSO = \frac{\text{Current balance}}{\text{Day's sales}} = \frac{\text{Current balance}}{\text{Ave. sales of n periods}} * 30$$

Figure 51: DSO Analysis: Days

The key figure **DSO** shows a customer's balance in relation to his or her sales. It specifies how many **days' sales a customer owes a company**.

There are two procedures for calculating the DSO days. On the selection screen, you can define the procedure required using the *DSO calculation type* parameter.

Examples for both calculation types:

n = 3 Balance Sales

Key date 02/15/2002 18,000 8,000

Period 01/2002 10,000 8,000

Period 12/2001 5,000 2,000

Period 11/2001 5,000 2,000

Calculation type 1:

Average balance = (10,000 + 5,000 + 3,000) / 3 = 6,000

Average sales = (8,000 + 5,000 +2,000) / 3 = 5,000

6.000

DSO = ---------- * 30 = 36

5.000

Result: The customer owes the equivalent of 36 days' sales

Calculation type 2:

Current balance = 18,000

Average sales = (8,000 + 5,000 +2,000) / 3 = 5,000

18.000

DSO = ---------- * 30 = 108

5.000

Result: The customer owes the equivalent of 108 days' sales

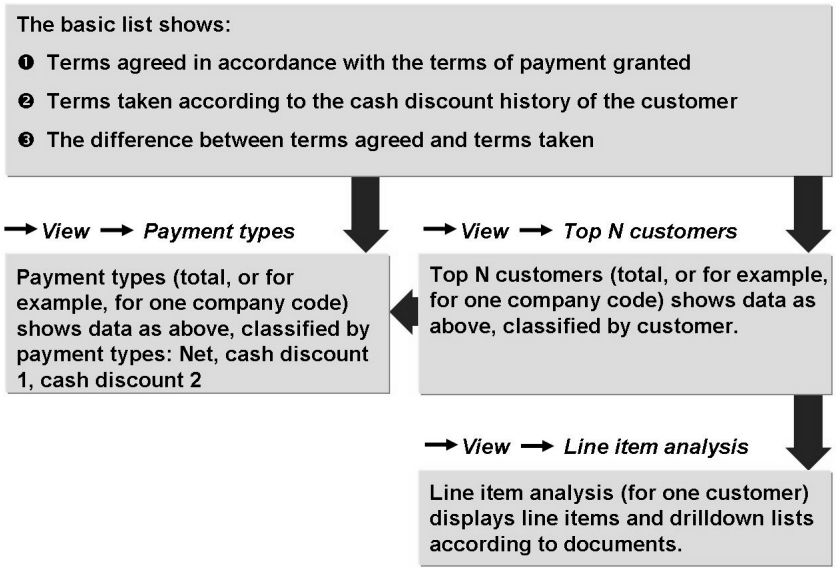


Figure 52: Terms Agreed/Terms Taken

In the terms agreed/terms taken evaluation, the difference between the terms taken and the terms agreed with the customer is calculated.

This evaluation is only available **for customers**.

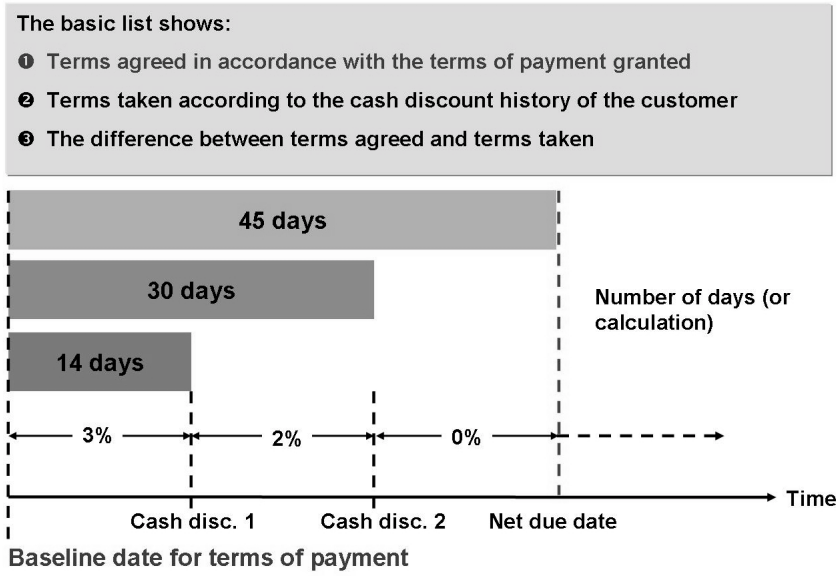


Figure 53: Days Agreed

To determine the **agreed terms of payment (in days)**, the invoices issued in the **key date - n days period** are used. You can define the number of days and the key date when you create the evaluation.

Calculation is based on the **total interest calculation numerators** and the **total invoiced amount**. The advantage of this is that when you summarize the agreed days, the system also includes information about the **invoice volumes** concerned.

The agreed days are calculated for all three subterms (cash discount days 1, cash discount days 2, and net days), if they exist.

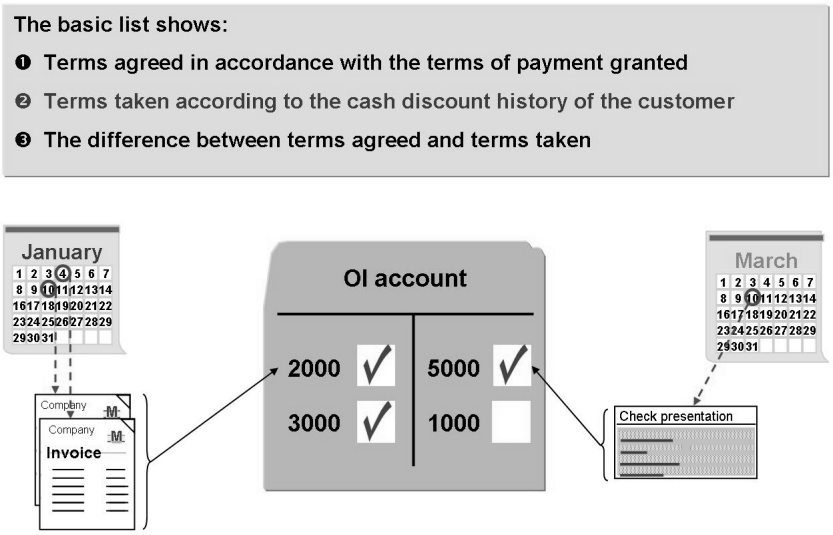


Figure 54: Days Taken

To determine the actual terms of payment (in days), the invoices paid in the **key date - n days** period are used. You can define the number of days and the key date when you create the evaluation.

The calculation also uses the total interest calculation numerators and the total invoiced amounts. The advantage of this is that when you summarize the actual days, the system also includes information about the invoice volumes.

First, the report determines **which subterm of payment** was used to pay each invoice (cash discount 1, cash discount 2, or net).

The following applies:

- No cash discount used, invoice paid net
- Up to 90 percent of the cash discount permitted for cash discount 1, invoice paid with cash discount 2
- 90 percent or more of the cash discount permitted for cash discount 1, invoice paid with cash discount 1

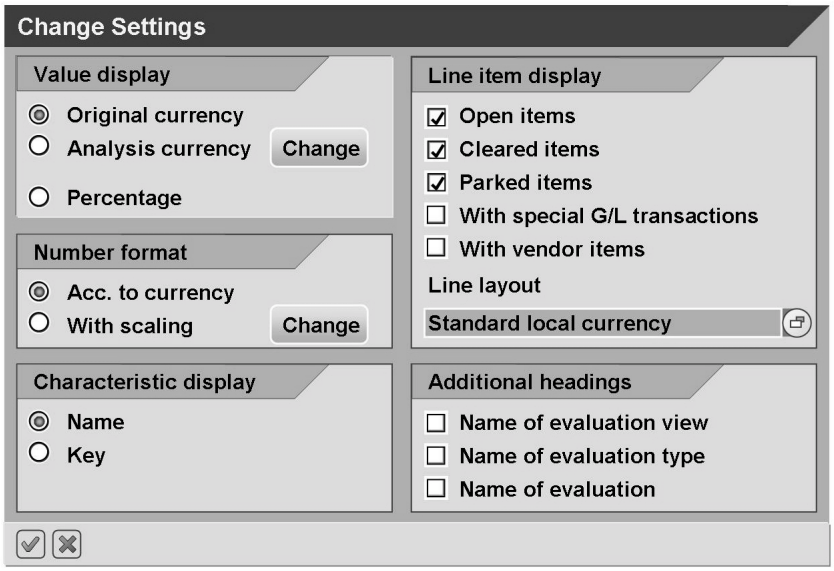
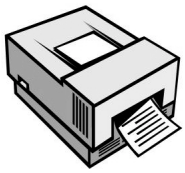


Figure 55: Functions for Drilldown Lists

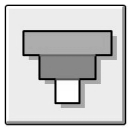
Navigate to a drilldown list on the lowest level of the tree structure of the AR/AP information system. The functions listed in figure 60 are available in all drilldown lists.

You can:

- Change the **currency** for the display
- Display **percentages**
- Set up **scaling** (for example, reports in thousands)
- Choose how the characteristics are to be displayed (with **name** or **key**)
- Set up the **line item display** according to your requirements
- Display the **headings** of the lists



- **Print drilldown list**



- **Sort drilldown list by column**

Figure 56: Printing and Sorting

You can:

- **Print** the drilldown list
- **Sort** the drilldown list by the columns displayed

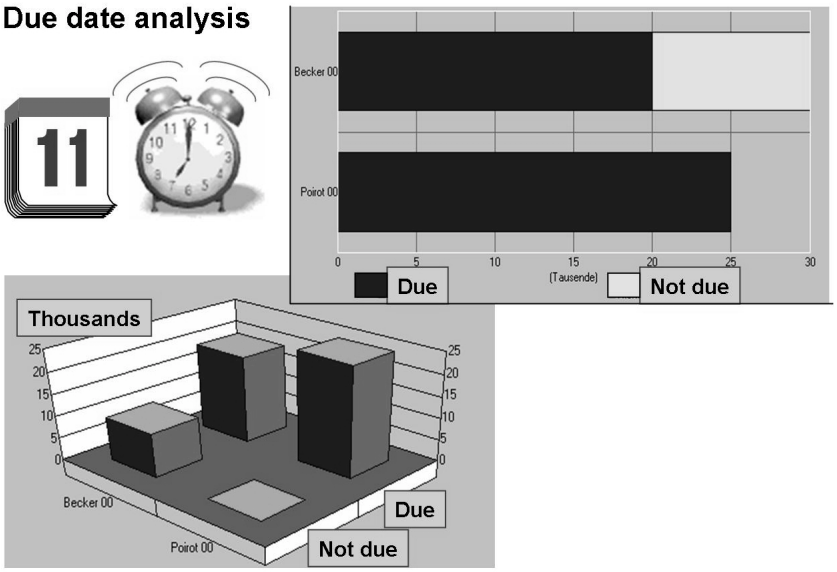
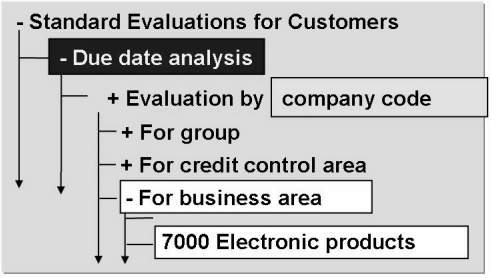
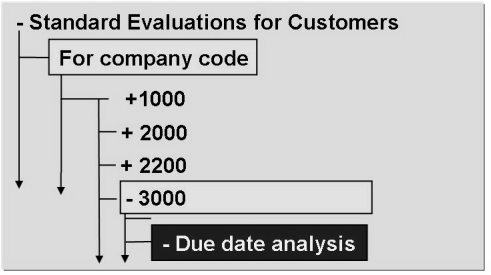


Figure 57: SAP Presentation Graphic

You can display the values using an **SAP presentation graphic**.



- You can save the access paths for the required drilldown lists when you call up the Accounts Receivable/Accounts Payable information systems.



- You can change the direction by navigating through the tree structure so that the tree goes from the evaluation views to the evaluation levels. You can also save access paths for this direction.

Figure 58: Report Tree: User-Specific Access Path

Exercise 6: Customer/Vendor Information System

Exercise Objectives

After completing this exercise, you will be able to:

- Create evaluations in the information system
- Describe various display options for evaluations
- Navigate in the tree structure of the accounts receivable/accounts payable information system and adjust it to your needs

Business Example

Managers in accounts receivable want better reporting functions. In particular, they want to be able to analyze combinations of different variables (for example, company code, business area, and credit control area). They also want to be able to drill down from the totals levels to the detail levels of individual documents. You need to demonstrate that these functions are provided by the accounts receivable information system, which accesses a preselected dataset.

Task 1:

Create an **evaluation** for **evaluation view GR##** (## = your group number), which you just created.

1. To ensure that the system selects only the data from your new evaluation view, GR##, create a corresponding **variant ##** (## = your group number) for the **data generation report RFDRRGEN** with the name **evaluation view GR##** (## = your group number) by choosing **only your new evaluation view, GR##** (## = your group number).

2. Use the **Job Wizard**. Give your job the name **Infosystem GR##** (## = your group number). Choose *ABAP program step*. The name of the report is **RFDRRGEN**. Use the variant that you just created, **variant ##**. You want to start the job **immediately**, as soon as you have finished defining it.

   Check to see when your job is complete.

Continued on next page

Task 2:

Display the evaluation so that you can analyze the overdue items in the application.

Display the results of the evaluation.

After you have created the data for your evaluation view, you can display the data in accounts receivable.

1. Using the accounts receivable information system, generate an **overdue items by city analysis** for **company code 1000**. Use your **evaluation view Customer Evaluations GR##** (## = your group number).

2. Which city has the highest number of days in arrears?

   _____
   _____
   _____
   _____

3. Which city has the highest total items displayed at the key date?

   _____
   _____
   _____
   _____

Task 3:

Optional: Investigate the options provided by the functions in the drilldown list:

1. **Switch path.** Find your evaluation in your evaluation view GR##.
2. **Set focus** in the accounts receivable/accounts payable information system. Save your settings. Exit the report tree and then call it up again. Check whether your settings have been saved.

   Use the expanded level of both structures to save your user-specific settings.

   This is useful if you always want to evaluate the same data selection.
3. Display the evaluation with the currency **USD as the analysis currency, exchange rate type“M”, translation on current date**.
4. As **additional headings** for your list, choose the **names of the evaluation view, evaluation type, and evaluation**.

Solution 6: Customer/Vendor Information System

Task 1:

Create an **evaluation** for **evaluation view GR##** (## = your group number), which you just created.

1. To ensure that the system selects only the data from your new evaluation view, GR##, create a corresponding **variant ##** (## = your group number) for the **data generation report RFDRRGEN** with the name **evaluation view GR##** (## = your group number) by choosing **only your new evaluation view, GR##** (## = your group number).

   a) Own variant for program RFDRRGEN:

      Choose System → Services → Reporting

      Report: RFDRRGEN

      → *Goto → Variants*

      Variant: ## (## = your group number)

      Variants → Create (or choose "Create")

      Evaluation view: GR## (## = your group number)

      (Enter your evaluation view GR## from the previous exercise)

      Edit → Attributes

      Meaning: Evaluation view GR##

      Save

      (A message appears, stating that your variant has been saved). Again: Save (stores the values of your variant).

2. Use the **Job Wizard**. Give your job the name **Infosystem GR##** (## = your group number). Choose *ABAP program step*. The name of the report is **RFDRRGEN**. Use the variant that you just created, **variant ##**. You want to start the job **immediately**, as soon as you have finished defining it.

Continued on next page

Check to see when your job is complete.

a) Create preselected dataset

Information System → Tools → Create Evaluations → Goto → Wizard version (or choose "Job Wizard"*).*

Continue

Job name: Information system GR## (## = your group number)

Continue

Choose "ABAP program step"

Continue

ABAP program name: RFDRRGEN

Variant: ##

Continue

Continue

Choose Start Immediately.

Continue

Continue

Finish

Display job:

Goto → Own jobs (or choose *Own jobs*)

Goto → Update display (or choose "Update" until you reach the "Complete" status)

Select your second job.

Choose *Job log*.

You will see that your new evaluation view "GR##" has been created.

Continued on next page

Task 2:

Display the evaluation so that you can analyze the overdue items in the application.

Display the results of the evaluation.

After you have created the data for your evaluation view, you can display the data in accounts receivable.

1. Using the accounts receivable information system, generate an **overdue items by city analysis** for **company code 1000**. Use your **evaluation view Customer Evaluations GR##** (## = your group number).

   a) ***Choose Information System → Tools → Display Evaluations***

      You see that your evaluation view GR## (customer evaluations GR##) has been created as an additional node in the report tree.

      Navigate within the evaluation view that you created.

      Choose Customer evaluations GR## → Overdue items → Evaluation by city → For company code: 1000 IDES AG.

2. Which city has the highest number of days in arrears?

   Answer:

3. Which city has the highest total items displayed at the key date?

   Answer:

Task 3:

Optional: Investigate the options provided by the functions in the drilldown list:

1. **Switch path.** Find your evaluation in your evaluation view GR##.

   a) Switch path.

      Choose *Customer evaluations GR## → For company code → 1000 IDES AG → Overdue items analysis → By city:*

2. **Set focus** in the accounts receivable/accounts payable information system. Save your settings. Exit the report tree and then call it up again. Check whether your settings have been saved.

   Use the expanded level of both structures to save your user-specific settings.

Continued on next page

This is useful if you always want to evaluate the same data selection.

a) If you have expanded the customer tree:

Set focus

Save

Exit the report tree and then call it up again.

3. Display the evaluation with the currency **USD as the analysis currency, exchange rate type“M”, translation on current date**.

a) *Setting → Change*

Value display: Select Currency analysis and choose Change

Currency: USD

Exchange rate type: M

Key date for conversion: *current date*

4. As **additional headings** for your list, choose the **names of the evaluation view, evaluation type, and evaluation**.

a) *Setting → Change*

Additional headings: select all

Lesson Summary

You should now be able to:

- Create evaluations in the information system
- Use various options to display evaluations and navigate within the tree structure of the accounts receivable/accounts payable information system

Unit Summary

You should now be able to:

- Explain how the accounts receivable/accounts payable information system works
- Name the various options for customizing the accounts receivable/accounts payable information system and explain the effect of these options on evaluations
- Create evaluations in the information system
- Use various options to display evaluations and navigate within the tree structure of the accounts receivable/accounts payable information system

Unit 4

Drilldown Reporting in Financial Accounting

Unit Overview

Employees in General Ledger Accounting are looking for ways to display appropriate evaluations and key figures with their own forms and reports when they drill down data within data that is to be evaluated.

Unit Objectives

After completing this unit, you will be able to:

- Describe your knowledge of the architecture of drilldown reporting
- Explain the terms **characteristics** and **key figures** and the different types of each.
- Explain the difference between single-axis and dual-axis forms and use these forms appropriately
- Use various navigation options in drilldown reports
- Define forms
- Define and execute reports
- Define forms and reports more flexibly using characteristic and text variables
- Use different types of report outputs
- Create graphics
- Export data to Microsoft Excel
- Have the system perform currency translation
- Set up a report/report interface
- Use report assignments

Unit Contents

Lesson: Architecture of Drilldown Reporting

Lesson Overview

In this lesson, we will discuss the architecture of drilldown reporting.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe your knowledge of the architecture of drilldown reporting

Business Example

Employees in Financial Accounting want to use the evaluation options in drilldown reporting. They are primarily interested in finding out the basics of the drilldown reporting architecture. They also want a brief insight into the possible report types using existing form types in Financial Accounting.

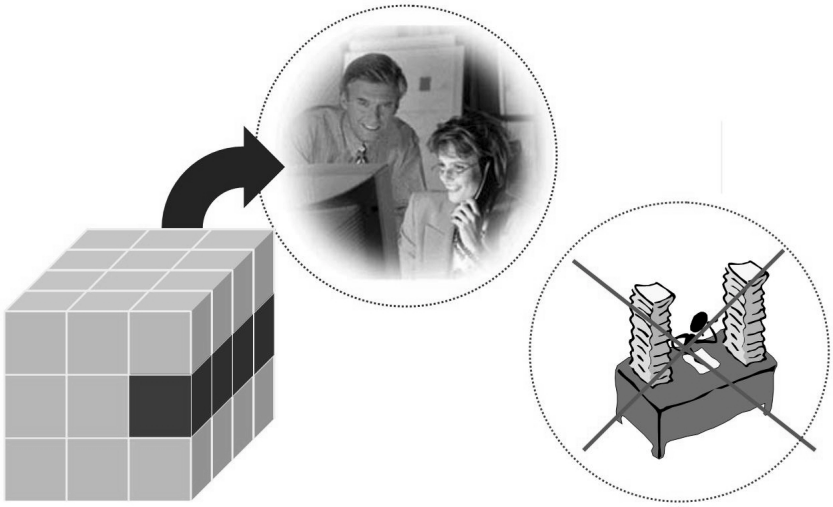


Figure 59: Drilldown Reporting

Drilldown reporting is a dialog-oriented information system for evaluating data from the FI, GL, AR, and AP databases.

Drilldown reporting contains helpful functions for navigating in the dataset. It also contains several additional functions for processing a report interactively.

SAP Graphics, SAPmail, and various printing functions are connected to drilldown reporting together with Microsoft Word for Windows and Microsoft Excel.

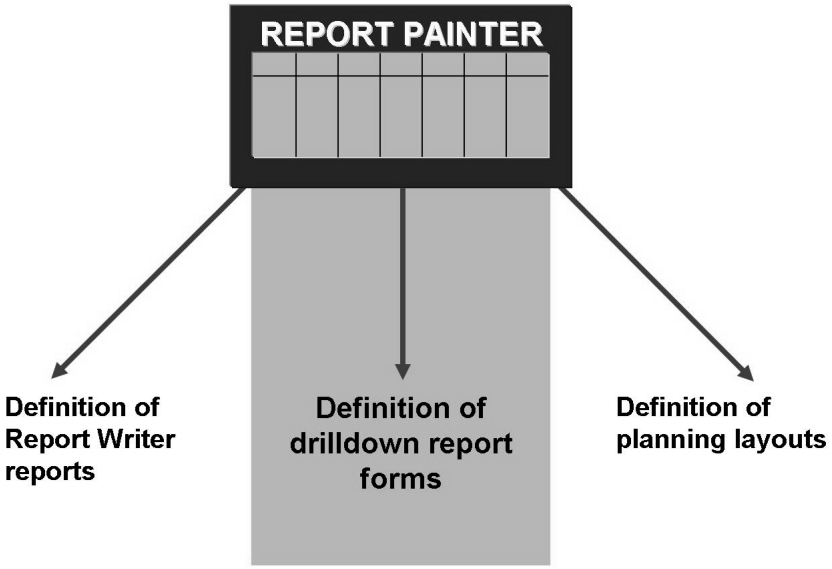


Figure 60: Using the Report Painter

You can use the graphic interface of the Report Painter for various activities (for example, to define Report Writer reports, drilldown forms, and planning layouts).

In this unit, you will learn how to use the Report Painter to create drilldown report forms, which are required for drilldown reports in FI.

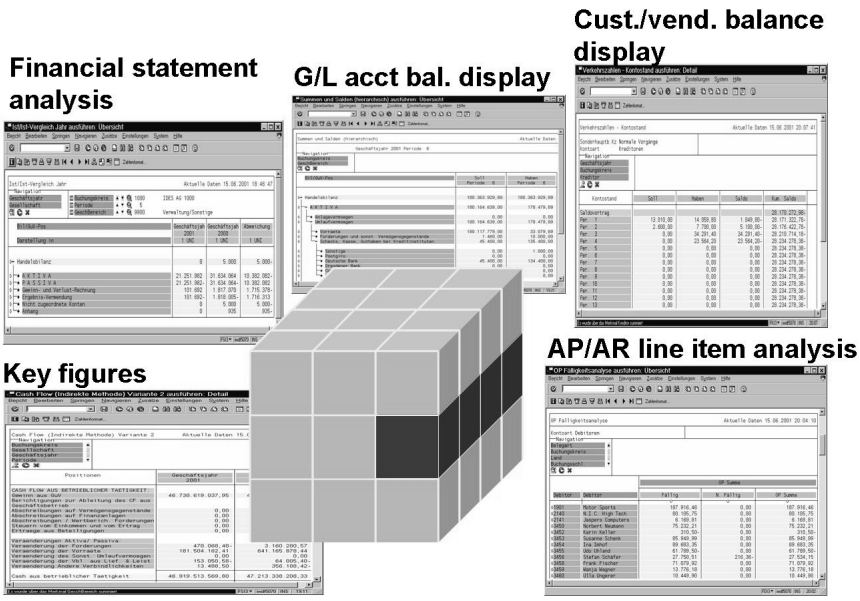


Figure 61: Form Types: Drilldown Reporting in FI

The following report types can be used for G/L account evaluations:

1. Reports for financial statement analysis: These reports are based on the financial statement versions defined in Financial Accounting. You can carry out any number of variance analyses based on actual and plan data (annual, half-year, quarterly, and monthly).

2. Key figure reports: For key figure reports, the system takes into account only the financial statement items in the financial statement version that you need for the calculation of specific key figures. This is not the case for financial statement analysis reports. Financial statement version key figures could be for example, equity ratio (stockholders' equity: total equity), debt-equity ratio (external capital: stockholders' equity), and capitalization ratio (fixed assets: total assets). You can create key figures from report rows and/or columns using an integrated formula interpreter.

3. Balance display:

You can use the following report types for customer or vendor drilldown reports:

a) Balance display

b) Line item analysis

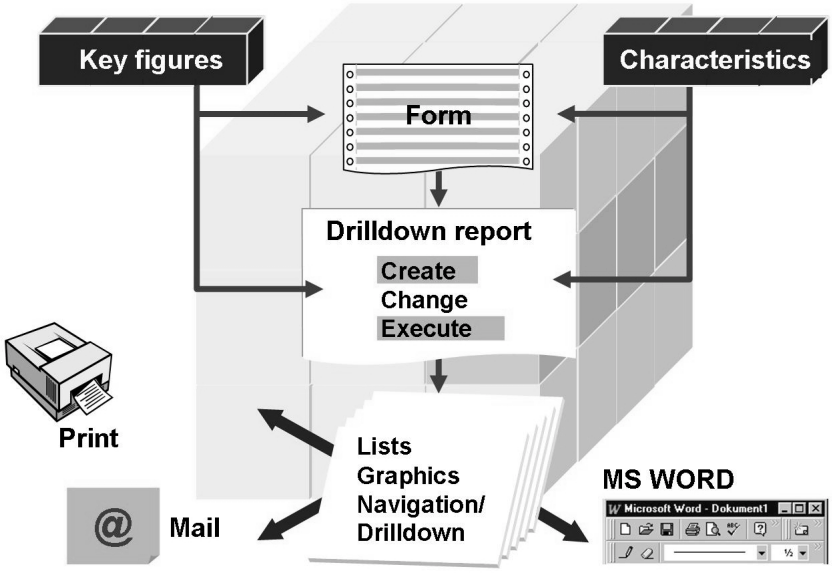


Figure 62: Architecture of Drilldown Reporting

As shown above, a report definition can contain characteristics, key figures, and forms. A report is a number of interactive, controllable report lists and graphics that are displayed on the screen.

Drilldown reporting provides useful functions for navigating within the dataset (for example, next level, next object within a level, hiding a level, detail list/drilldown list). It also contains several additional functions that can be used

to process a report interactively (sorting, specification of conditions, ranked list, and so on). You can send report lists (for example, as a fax), display them on the Internet, or transfer them as files to Microsoft Word and Microsoft Excel.

In addition to the dialog functions for displaying reports, drilldown reporting also contains functions for printing reports. There are various print preparation functions for you to structure your report as you require (such as pagebreak, headers and footers, and underlining).

A **form** describes the basic content and formal structure of report lists. A form can be seen as a **semi-finished product** for a **report**; it is later completed with characteristics and key figures when you define the report. Characteristics appear in the form as well as in the report. You can choose key figures either in the form or the report.

Lesson Summary

You should now be able to:

- Describe your knowledge of the architecture of drilldown reporting

Lesson: Characteristics and Key Figures

Lesson Overview

In this lesson, you will learn the meaning of characteristics and key figures in lists.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the terms **characteristics** and **key figures** and the different types of each.

Business Example

Employees in Financial Accounting want to use characteristics and key figures in drilldown reporting. They are mainly interested in the different types.

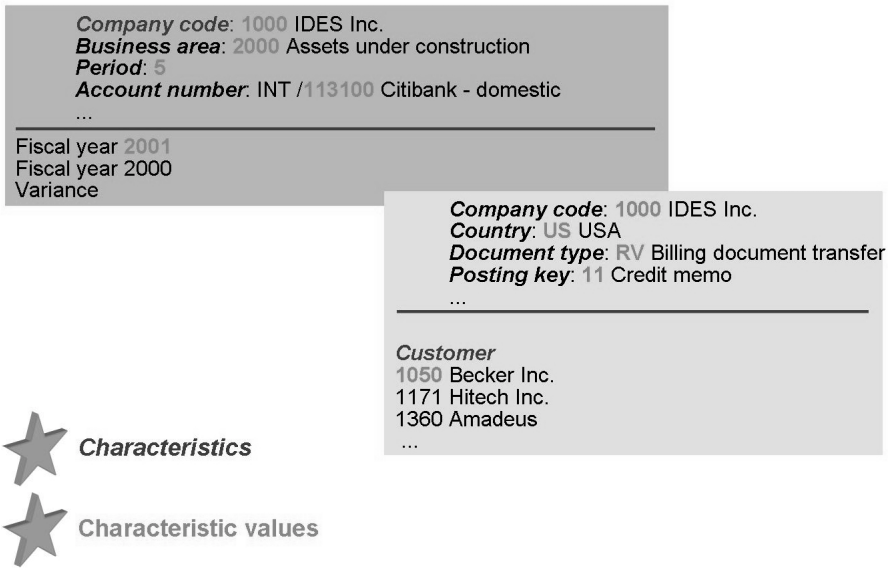


Figure 63: Characteristics and Characteristic Values

Characteristics specify the classification options for the dataset. Examples of characteristics are **company code**, **business area**, and **plan/actual indicator**. The time reference (**fiscal year**, **period**) is also a characteristic.

Characteristic values are concrete forms of a characteristic. Possible values for the characteristic **company code** could be 0001, 0002, 1000, or all the company codes defined in the system.

A combination of **characteristics** and **characteristic values** is generally called an **object** in drilldown reporting.

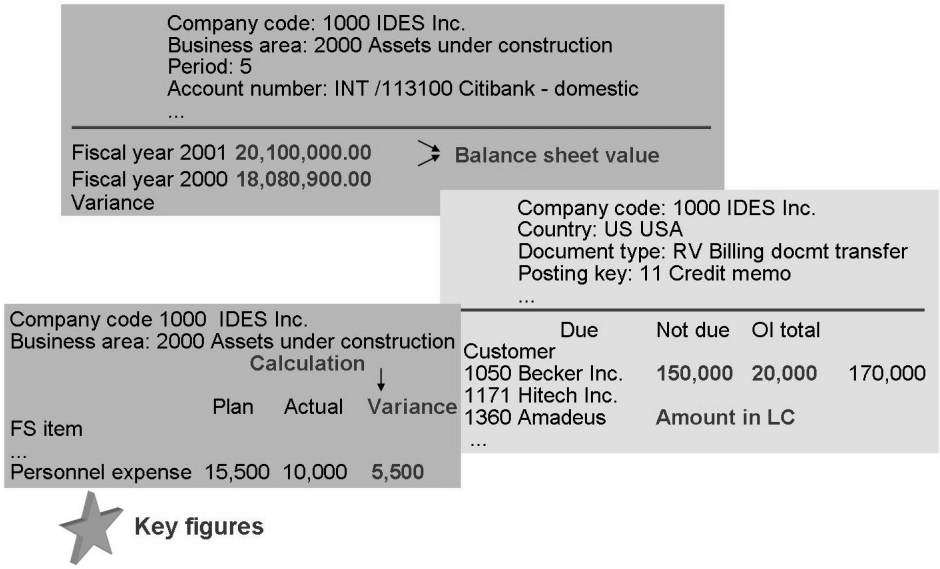


Figure 64: Key Figures

In the applications, there are various **key figures** that can be relevant to evaluations. Key figures are not just **values** and **quantities**, but also **calculations** involving these values and quantities with user-defined formulas.

The following are examples of key figures:

- **Value**: Balance sheet value, debit total, sales/purchases
- **Quantity**: Number of employees, sales quantity
- **Calculation**: Sales per employee, plan/actual variance

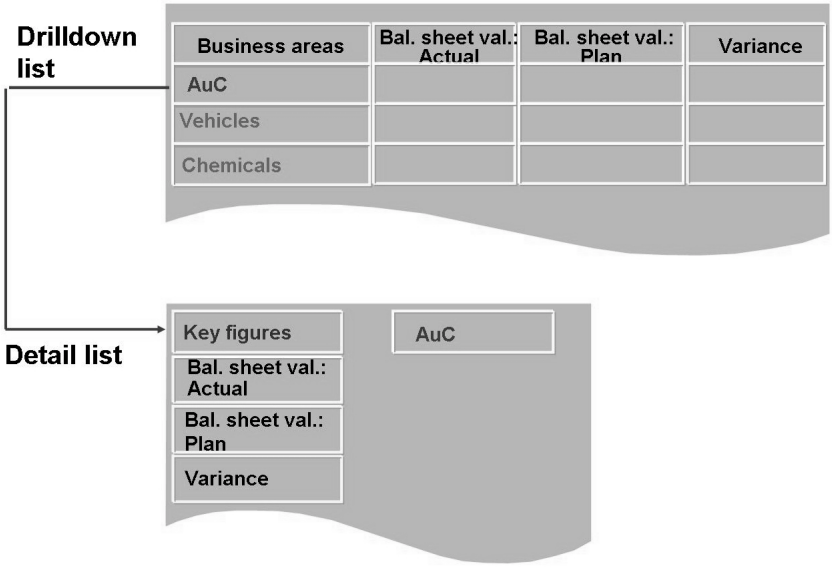


Figure 65: Drilldown List/Detail List

There are two types of list for displaying information: The **detail list** and the **drilldown list**.

In a **drilldown list**, several objects (for example, assets under construction, vehicles, chemicals) are formatted using a selection of key figures. Usually, the key figures are in the columns of the list (for example, balance sheet value, total debit postings, total credit postings). The rows contain the characteristic values of all the characteristics that are drilled down.

In a **detail list**, an individual object (for example, business area) is formatted for all key figures according to the form. Usually, the key figures are in the rows of the detail list (for example, balance sheet value, total debit postings, total credit postings).

Lesson Summary

You should now be able to:

- Explain the terms **characteristics** and **key figures** and the different types of each.

Lesson: Form Types

Lesson Overview

In this lesson, you will learn about using single-axis and dual-axis forms (matrix) for drilldown reporting in FI.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the difference between single-axis and dual-axis forms and use these forms appropriately

Business Example

Employees in Financial Accounting want to use a single-axis or dual-axis form with key figures.

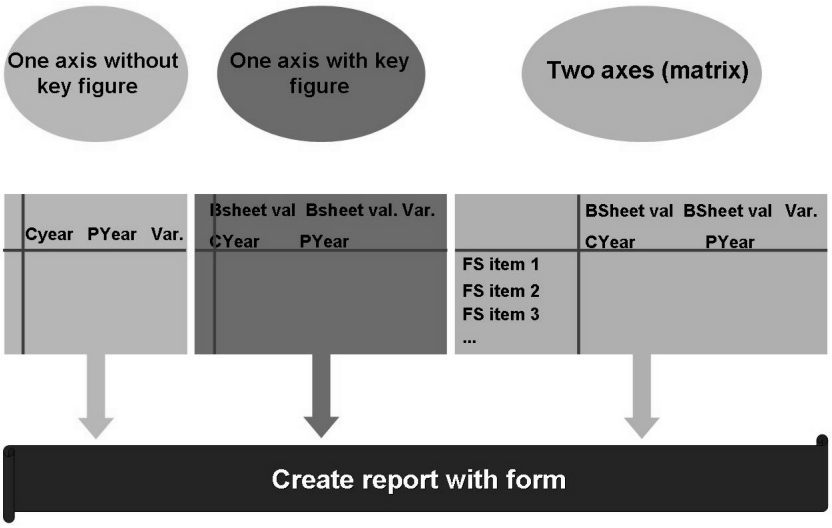


Figure 66: Different Types of Forms

The following form types exist:

Single-axis form without key figure

- If you are using a single-axis form without key figures, you define either the form rows or columns with characteristics. When you access the initial screen, the system displays an empty list with columns.

Single-axis form with key figure

- If you are using a single-axis form with key figures, you define either the form rows or columns with key figures and characteristics. When you access the initial screen, the system displays an empty list with rows.

Dual-axis form with key figure

- If you are using a dual-axis form with key figures, you define the form rows and the columns with key figures and characteristics. When you access the initial screen, the system displays an empty list containing rows and columns. You are free to define whether the rows contain key figures and the columns contain characteristics, or vice versa. It depends on what you want to report.

When you create a form, you define the name and the type of form that you want to process.

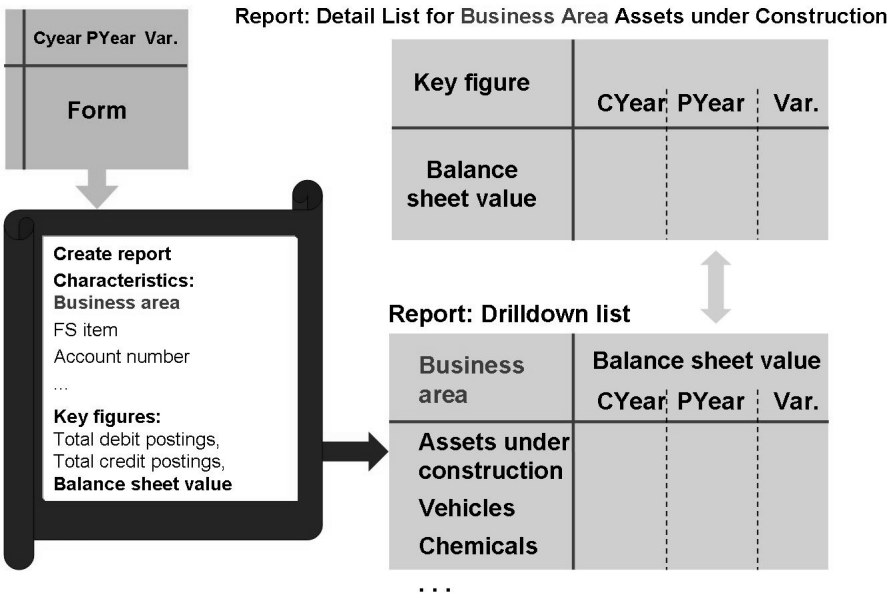


Figure 67: One Axis with Key Figure

In a single-axis form with no key figures, you make selections only in the characteristics columns. The characteristics that you select in the form define the column content. You can also perform calculations with formulas (for example, the variance could be the difference between plan and actual).

You select the key figures and the drilldown characteristics (that is, the characteristics whose values you want to use to navigate in the report) when you define the report (for example, the characteristics business area, financial statement item, or account number).

The drilldown list contains a two-line column heading. The key figures (for example, balance sheet value, total debit postings, total credit postings) are in the first row and the characteristics that you selected in the form (for example, fiscal year, prior year, variance) are listed below. The values for the drilldown characteristics are in the rows (for example, assets under construction, vehicles, and chemicals for the business area).

In the detail list, the characteristics chosen in the form are contained in the columns, and the key figures are contained in the rows. The detail list displays the results of a selected characteristic value (for example, assets under construction for business area).

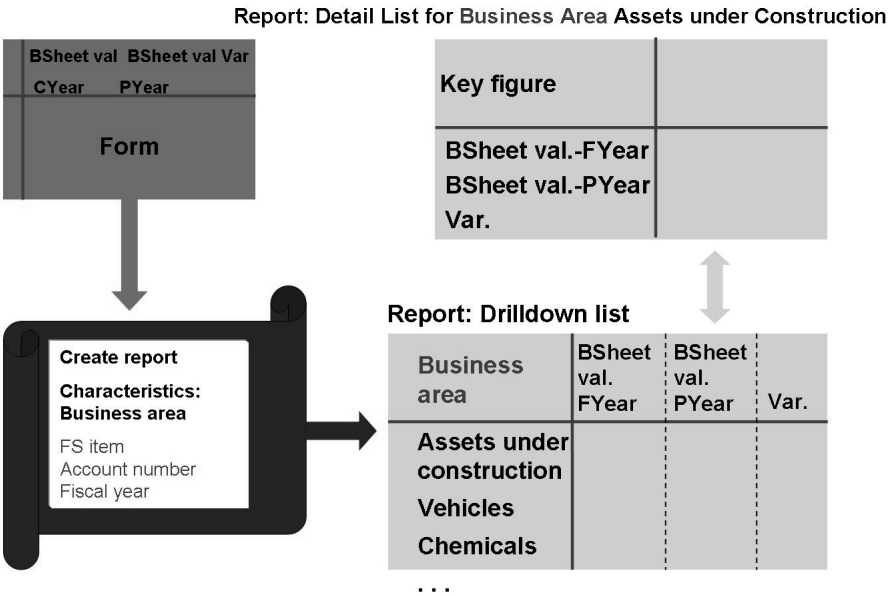


Figure 68: One Axis with Key Figure

In a single-axis form with key figures, the key figures are integrated with characteristics in the rows of the form (for example, fiscal year balance sheet value, prior year balance sheet value with variance).

In the report definition, only the drilldown characteristics are chosen (for example, business area, financial statement item account number, and so on).

In the drilldown list, the key figures integrated with the characteristics are the columns of the form, and the values of the drilldown characteristics form the rows (for example, assets under construction, vehicles, chemicals, and so on).

The detail list has one column and contains the selected characteristic value for which you want to report (for example, assets under construction), and the key figures are in the rows.

Hint: When you use a single-axis form with key figures, you define either the rows or the columns for the form. From the initial screen, the system displays a list containing rows but no content. However, you can use the column display function to tilt the form. This means that you are free to decide whether you want to define rows or columns for this form type.

You define the detail list when you define a form. This means that the position of the elements that you define in the form corresponds to the position in the detail list. Therefore, for single-axis forms with key figures, the key figures are defined in the rows by default.

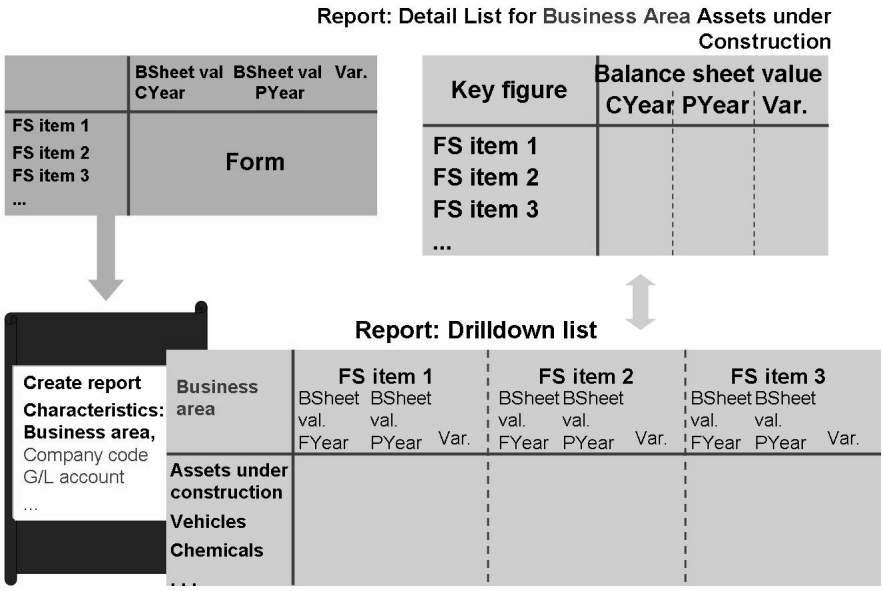


Figure 69: Two Axes (Matrix)

In a form with two axes (matrix), both the rows and columns are defined using key figures or characteristics. The key figures have to be in **either** the rows or the columns of the form, but you can enter the characteristics in the rows **and** the columns.

When you define the report, you then choose only the drilldown characteristics (for example, business area, company code, account number, and so on).

In figure 74, the columns of the drilldown list are created with two levels; that is, the higher level contains the key figures (debit total, credit total) and the lower level contains the characteristics chosen in the form (fiscal year actual, fiscal year plan with variance). The lines contain the values for the business area (assets under construction, vehicles, chemicals, and so on).

In the detail list, the characteristics chosen in the form appear in the columns, and the key figures chosen in the form appear in the rows. The detail list is a report about the characteristic value chosen (assets under construction).

Hint: In all types of forms, you can use various functions to change the layout and settings as you require (colors, number format, separators, text, and so on).

Lesson Summary

You should now be able to:

- Explain the difference between single-axis and dual-axis forms and use these forms appropriately

Lesson: Navigation in Reports

Lesson Overview

In this lesson, you will learn to navigate in drilldown reports, using basic lists and drilldown lists.

Lesson Objectives

After completing this lesson, you will be able to:

- Use various navigation options in drilldown reports

Business Example

Employees in Financial Accounting want to use the wide range of navigation options provided in FI drilldown reports.

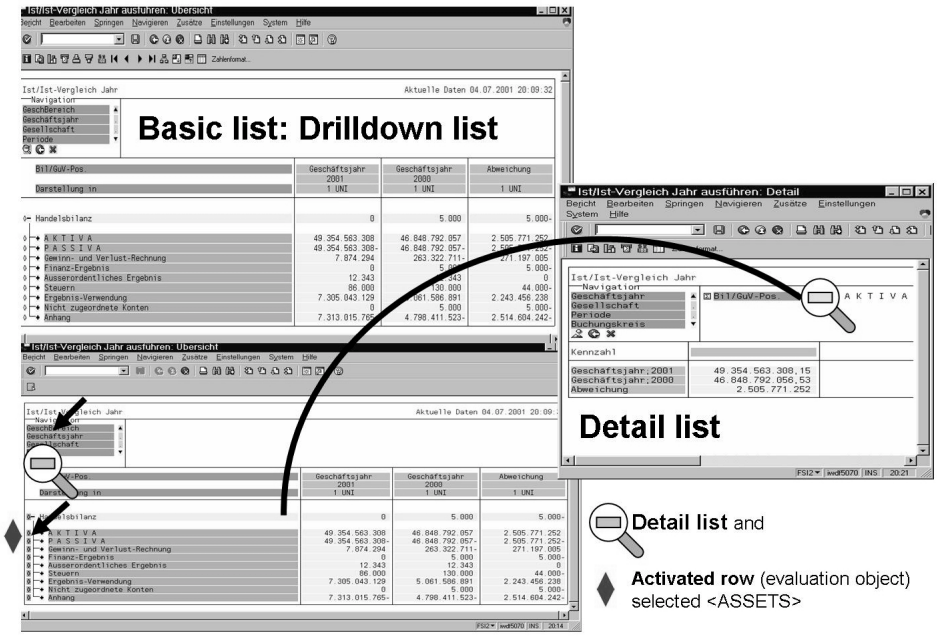


Figure 70: Navigation in Classic Drilldown Reports

From drilldown list to detail list

If you want to switch from the drilldown list to the detail list, choose the *Detail list* symbol. All of the row selection symbols are then highlighted in a different color. Choose the required evaluation object. The system then displays the required detail list.

Back to basic list: If you want to return to the basic list, choose the **XX** symbol (in red). Note that changes that you make to settings in the meantime -- for example, changes to the number format -- are retained.

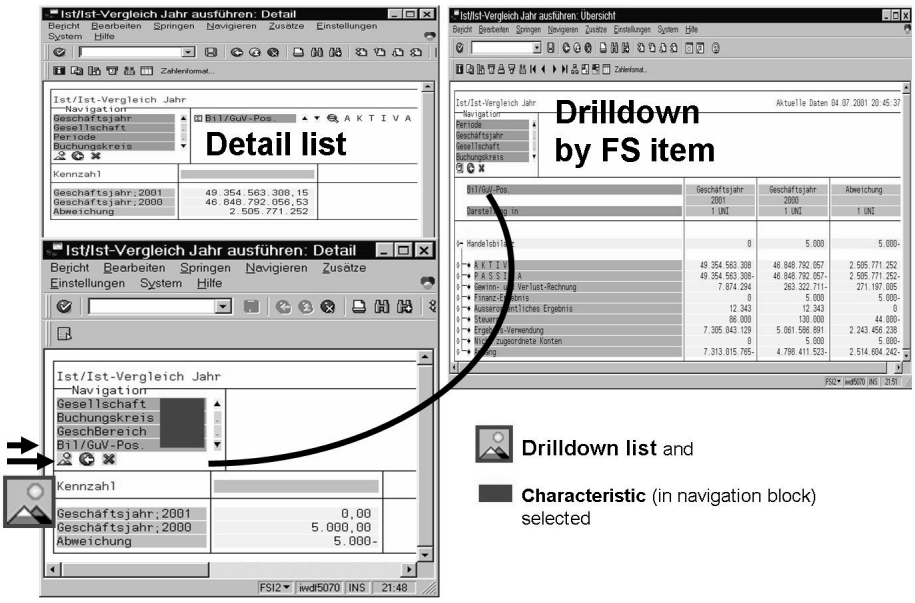


Figure 71: Navigation in Classic Drilldown Reports (2)

From detail list to drilldown list

If the basic list is defined as the detail list for a report, the detail list is the first screen to be displayed when you execute your report. If you want to switch from the detail list to the drilldown list, choose *Drilldown list*. The system then highlights **all the free characteristics in the navigation block**. Choose a **characteristic** by clicking it. The system then displays the **drilldown list**.

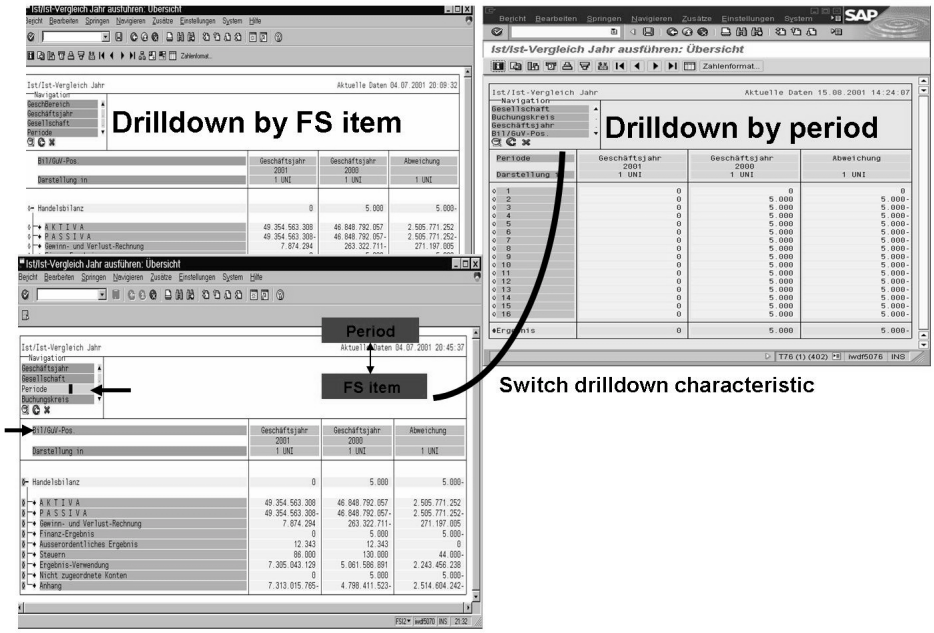


Figure 72: Navigation in Classic Drilldown Reports (3)

You are in the drilldown list in which the *FS item* characteristic is drilled down. The navigation area for the drilldown list contains additional characteristics that you can use. If you want to **exchange** the *FS item* with another characteristic, for example, *Period*, first click *FS item* and then *Period*. The two characteristics then change places: *FS item* is now available for selection in the navigation block, and *Period* is drilled down for all characteristic values.

Note: With new G\L functionality all forms and reports are based in the new table FAGLFLEXS which is the reporting table for FAGLFLEXT

Exercise 7: Drilldown Reporting in Financial Accounting

Exercise Objectives

After completing this exercise, you will be able to:

- Define and execute forms and reports of different types in General Ledger Accounting.
- Explain and use navigation options when you are displaying a report
- Define forms and reports more flexibly using characteristic and text variables
- Try various layout settings for the report output
- Explain the different types of cells and use cells in formulas
- Use different output types for reports and test the functions during output

Business Example

Employees in Financial Accounting want to learn about the evaluation options provided by drilldown reporting, and use the various navigation options.

Task:

Navigation

1. Execute the standard report for the financial statement analysis **0SAPFS10-01** (Actual/Actual Comparison for Year).

   User menu → AC280 Drilldown Activities → Execute standard drilldown reports → Actual/actual comparison for year

   On the selection screen, enter company code **1000** and the **Currency type 10**. The **FIS Annual Rep.Structure** is **INT**. Ledger is **0L** Reporting year is current year. Reporting year from and to is **1-16** and comparison year is the previous year from **1-16** Choose *Classic drilldown report* as the output type.

   The initial display is a drilldown list. The FIS Annual Rep.Structure and the **financial statement items** are shown in the row. The **columns show the financial statement results** for the **current fiscal year, the previous year and the variance**.

   Using your knowledge of the navigation options in the output (changing from drilldown to detail list and changing the drilldown characteristics), find the following results and make a note of them in the following table:

Continued on next page

1. Financial statement item **Wages and salaries** for the **current fiscal year** _____
2. Financial statement item **Provisions** for the **profit center 1005 (Automobiles)** in the **previous year** _____
3. FS item **Capital Revenue** for the **profit center 1000** in **period 7** of the **current fiscal year** _____

Solution 7: Drilldown Reporting in Financial Accounting

Task:

Navigation

1. Execute the standard report for the financial statement analysis **0SAPFS10-01** (Actual/Actual Comparison for Year).

   User menu → AC280 Drilldown Activities → Execute standard drilldown reports → Actual/actual comparison for year

   On the selection screen, enter company code **1000** and the **Currency type 10**. The **FIS Annual Rep.Structure** is **INT**. Ledger is **0L** Reporting year is current year. Reporting year from and to is **1-16** and comparison year is the previous year from **1-16** Choose *Classic drilldown report* as the output type.

   The initial display is a drilldown list. The FIS Annual Rep.Structure and the **financial statement items** are shown in the row. The **columns show the financial statement results** for the **current fiscal year, the previous year and the variance**.

   Using your knowledge of the navigation options in the output (changing from drilldown to detail list and changing the drilldown characteristics), find the following results and make a note of them in the following table:

1. Financial statement item **Wages and salaries** for the **current fiscal year** _____
2. Financial statement item **Provisions** for the **profit center 1005 (Automobiles)** in the **previous year** _____
3. FS item **Capital Revenue** for the **profit center 1000** in **period 7** of the **current fiscal year** _____

   a) *User menu → Execute standard drilldown reports → Actual/actual comparison for year*

      (or in the SAP menu: Accounting → Financial Accounting → General Ledger → Information System → General ledger reports (New) → Financial Statement / Cash Flow → General → Financial Statement Actual/Actual comparisons

      Company code: ***1000***

      Currency type: **10**

      In Report selections, enter FIS Annual Rep.Structure as **INT**

Continued on next page

Ledger is **0L**

Reporting year is the Current year

Reporting From & To is **1-16**

And comparison year is the **previous year** with 1-16 as periods for the fields Comparison per. from & To

Output type: ***Classic drilldown report***

The initial display is a drilldown list:

- Financial statement items in the rows
- Financial statement value results for the current fiscal year, the previous year, and the variance in the columns

Switch from the SAP Easy Access menu to your user menu .

In the folder *Execute standard drilldown reports:* Report, choose ***Actual/actual comparison for year*** **(financial statement analysis actual/actual comparison for year)**. On the selection screen, enter **company code *1000***, **FIS Annual Rep.Structure *INT***, and the **current fiscal year**. Execute the report.

FIS Annual Rep.Structure and the financial statement items are displayed in the rows. Navigate down to ***Profit and loss statement*** in the version, and then proceed until you find ***Wages and salaries***.

→ Profit and loss statement → Staff costs → Wages and salaries

Make a note of the financial statement value for this item in the current fiscal year.

Proceed to *Liabilities* and continue to navigate until you find ***Provisions***.

→ Liabilities → Provisions

Scroll through the **navigation area** above until you find the **profit center**. **Select** the *Tangible assets* row by clicking the angle brackets icon (<>). Then click ***profit center*** in the navigation area. The report values for the *Tangible assets* are now drilled down by business area. Make a note of the balance sheet value for the combination of *Provisions* and *profit center 1005 (Automobiles)* in the previous year.

You can change the characteristic display: You can choose a **name and key** by choosing ***Settings → Characteristic display***.

You can now reset the drilldown by the *Financial statement item* characteristic by choosing the **Σ (deactivate characteristic) icon**. The *Financial statement item* characteristic is now available for selection in the navigation area.

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Select the **profit center 1000** row by clicking the **angle brackets icon** (<>). Click the **FS item** drilldown characteristic (you may have to scroll down the navigation area). The report values for the profit center 1000 are drilled down **by financial statement item**. The FIS Annual Rep.Structure and the financial statement items are displayed in the rows. In the version, proceed to **LIABILITIES** and then navigate further until you have found ***Capital & reserves*** and then ***Capital Revenue***.

→ ***LIABILITIES*** → ***Capital & reserves*** → ***Capital Revenue***.

Select the ***Capital Revenue row*** row and then click ***Period/year*** in the navigation area. For the **Profit center 1000** and the financial statement item **Capital Revenue**, the system drills down the report values **by period/year**. Make a note of the financial statement value for the combination of *profit center 1000*, *Capital Revenue*, and *Period 7* in the current fiscal year.

Lesson Summary

You should now be able to:

- Use various navigation options in drilldown reports

Lesson: Form and Report Definition

Lesson Overview

In this lesson, you will learn to use single-axis and dual-axis forms (matrix) for drilldown reporting in FI.

Lesson Objectives

After completing this lesson, you will be able to:

- Define forms
- Define and execute reports
- Define forms and reports more flexibly using characteristic and text variables

Business Example

Employees in Financial Accounting want to define forms and reports for drilldown reporting in FI.

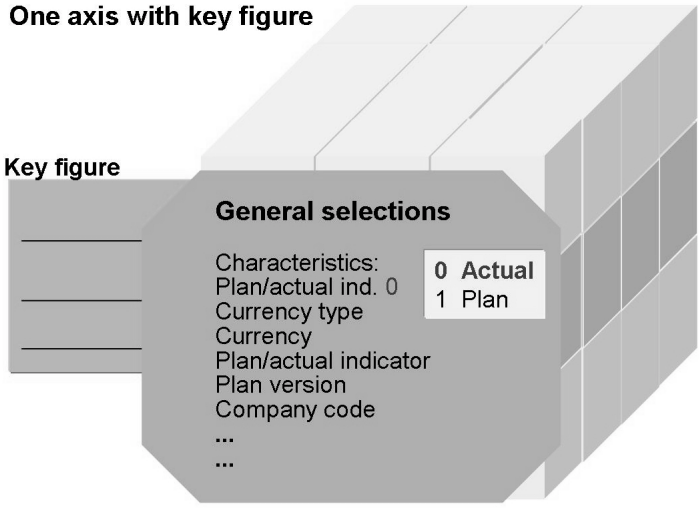

Figure 73: Form Definition: Example of Financial Statement Analysis

SAP delivers standard forms, which you can use as templates to create your own forms. The names for these standard forms are 0SAPBLNCE-01 through 0SAPBLNCE-NN, and you cannot use these names for your own forms.

Defining characteristics for all columns (general selections)

First, define the characteristics that apply to all the columns in your form. Since you want to enter actual data in all the columns of your form, you can define this general characteristic by choosing *Edit → General selections*.

A dialog box appears for you to select the characteristics for the general selections. In the dialog box, add the characteristic *Record type* to the table of selected characteristics and define the value **0** for actual data.

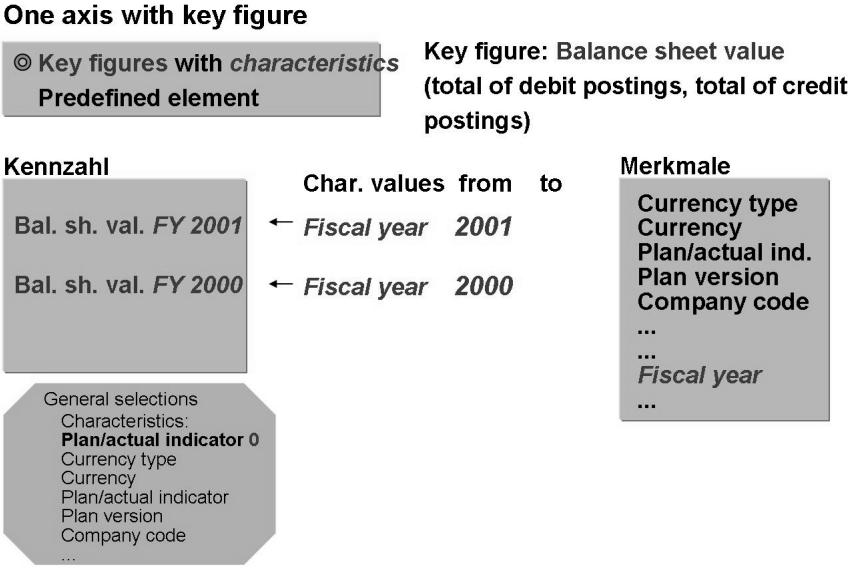

Figure 74: Form Definition (2): Example of Financial Statement Analysis

Once you have defined the general characteristics, you can then define the characteristics of the individual columns.

A dialog box appears, in which you can select *Key figure with characteristics*. A second dialog box appears. Choose *Balance sheet value (BILWERT)* from the list of available key figures. In this case, the key figure reflects the values of the balance sheet that you want to evaluate for your report.

To carry out an actual/actual year comparison, you also require the *Fiscal year* characteristic.

Then define the characteristic values for the characteristics that you have selected. For example, for the fiscal year, you can enter either fixed values or variables. If you want to enter fixed values, specify the specific value (for example, 2001).

Figure 79 shows the entry for two columns, in which you selected the fixed values 2001 and 2000 for the *Balance sheet value*.

You can enter three different lengths of text. These are then used as the column headings for the elements. You can enter a short, medium, or long text. Using the text type, you can later determine which text is used for each column. If you want to enter a two-line heading, note that when you enter a long text you separate the two lines using a semicolon (;). You can change the text type by choosing *Format → All columns → Text type*.

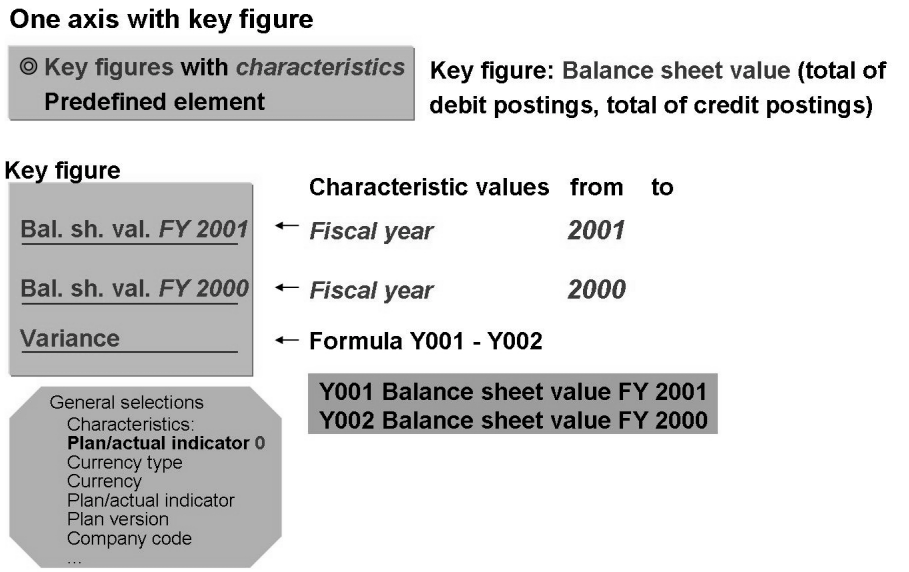

Figure 75: Form Definition (3): Example of Financial Statement Analysis

In the third column, you define the variance between the first and the second column.

To do this, place the cursor on the third column and choose *Edit* → *Element* → *Define element*.

On the following screen, choose *Formula*. The formula editor appears, in which you define the formula that is to be used to calculate the variance. Using the formula editor, you can perform standard arithmetic operations (+, -, *, /) with any elements.

Under ID, double-click the first value, select the minus sign, and then double-click the second value under ID.

On the following screen, maintain the text types for the *Variance* column.

Save the form.

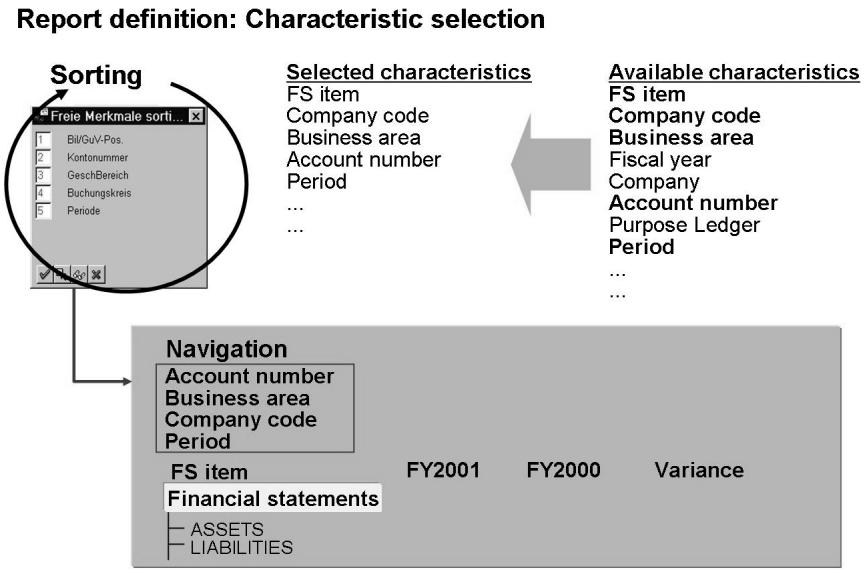

Figure 76: Report Definition: Example of Financial Statement Analysis

Enter the name of a new report or choose the name of the report whose definition you want to change. You have to choose an appropriate form for the report type (financial statement analysis, financial statement key figures, or balance display). You can choose a reference report if necessary.

On the *Characteristics* tab page, the system displays a list containing all the available characteristics. In the characteristic list, select the characteristics that you want to use for your evaluation in the report, and use the arrow buttons to add them to the report. These characteristics are the **drilldown characteristics** that you use to navigate in the report.

Using the *Sort characteristics* function, you can determine the order of the characteristics in the navigation block of the report list for the executed report. The order of the characteristics determines the layout of the standard drilldown. The characteristics that you defined for a characteristic value when you defined the report are above the navigation block and you cannot re-sort them. To improve performance, you should not select characteristics that you do not need in the drilldown report. Even if you are printing, you should only retain the characteristics that you actually require, otherwise the system outputs superfluous subtotals. The number of characteristics offered for selection is resricted by the selection criteria defined in the **form**. If you have already specified a characteristic in the form, it is no longer offered for selection.

Report definition: Characteristic values

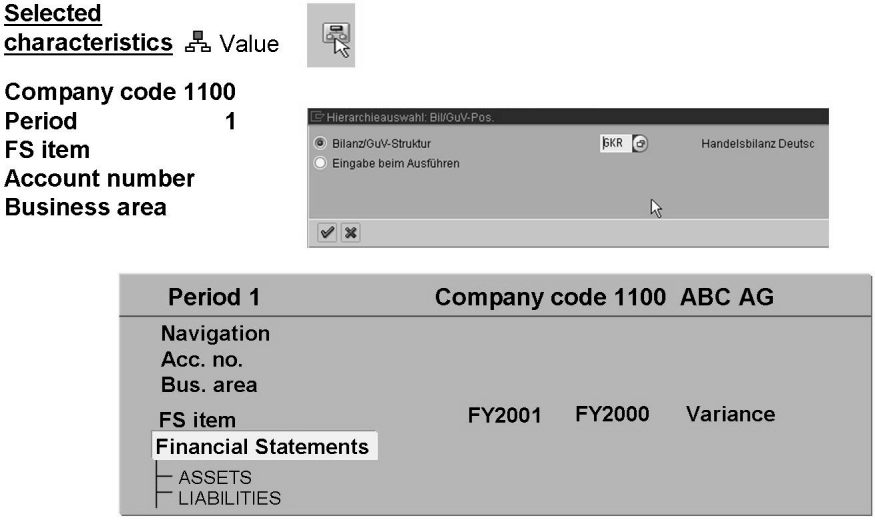

Figure 77: Report Definition (2): Example of Financial Statement Analysis

Once you have selected a characteristic, all the values for this characteristic are included in the report. There are various ways of restricting the value quantity of a characteristic for output in the report.

On the *Characteristics* tab page, you can restrict the characteristic values for each drilldown characteristic chosen. There are various options dependent on the report definition and the characteristic selected.

1. You do not make an entry. If you do not make any of the restrictions described below, the system selects all the characteristic values when you run the report. For example, the system displays all business areas for the *Business area* characteristic. In all other cases, the system reads only the characteristic value that you entered, for example, only *Assets under construction* for the *Business area*.

SAP recommends that you choose characteristics carefully to limit the quantity of data selected. This improves system response times.

1. You define a characteristic value for a characteristic. If, for example, you are only interested in the value 1100 for the *Company code*, you can restrict the report accordingly. The characteristic and the characteristic value then appear above the navigation block on the report list and have been defined (that is, you cannot use the characteristic as a drilldown characteristic).

1. You use a variable for characteristic values (see figure 83).

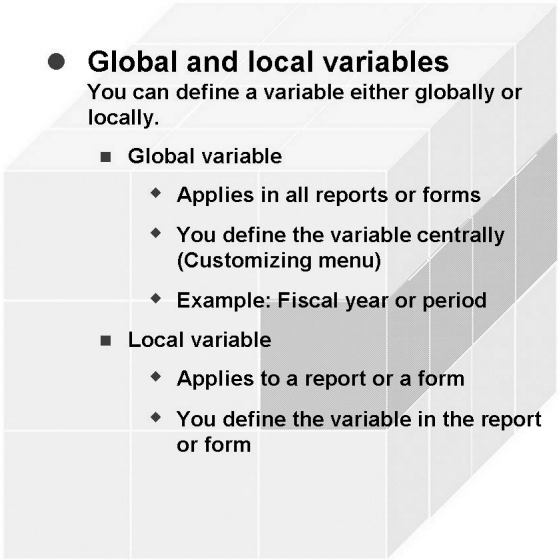

Figure 78: Variables: Overview

There are two types of variables: global variables and local variables.

If you use a variable only in a special form or report, you create a **local** variable. This is then only recognized within the form or report. If you define a local variable in a form, this variable applies in each report that uses the form. A local variable that you define in the report itself only applies to this report.

If you use certain variables frequently, you can define them **globally**. You can then use these variables in all forms and reports. You maintain global variables in Customizing. If you then want to use global variables for characteristics in a form or report, the system provides them as possible entries.

Hint: If you change a global variable, all reports and forms that use this variable are affected.

SAP delivers variables that start with a number.

If you use certain variables frequently, you should define them globally instead of in a report or form. You can then use these variables in all forms and reports. This is particularly useful for characteristics that frequently form part of general report selections (for example, period, fiscal year, and so on).

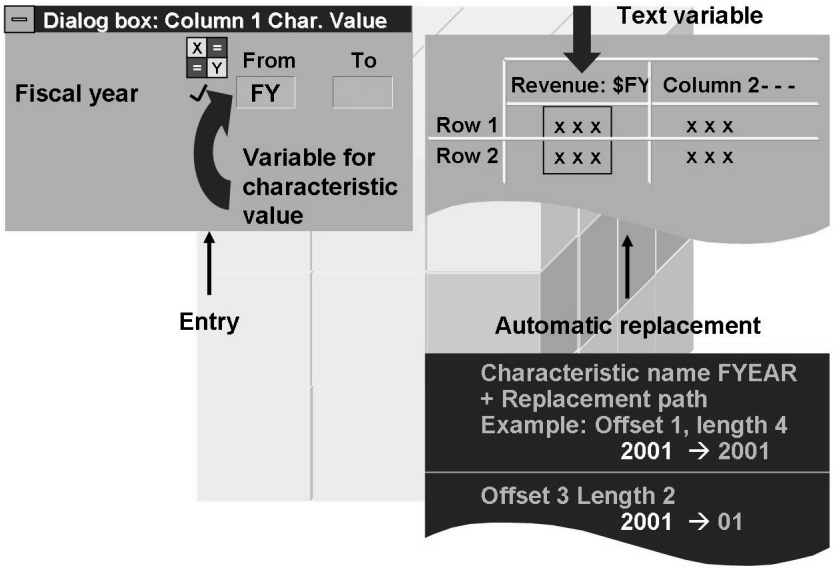

Figure 79: Variables for Form Definition

Certain variables for characteristic values are delivered, for example **1FY** (fiscal year).

Variables are uniquely identified by their name and their use (text/characteristic, and so on) and variables for characteristic values are identified by the field to which they refer.

One of the things that you have to specify when you define variables is a **replacement type**. The replacement type specifies how a variable is replaced by a value. You can replace a variable with a value either automatically or manually.

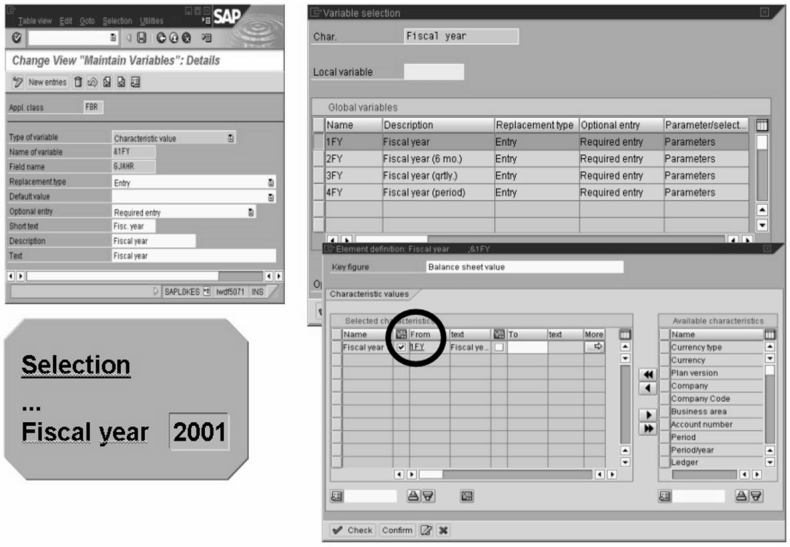

Figure 80: Variables Example: Fiscal Year Column

You can enter the name of the variable in the dialog box that is displayed when you select the *Variable* checkbox.

Let us say, for example, you want to create a form in which the year is entered in the first column using a variable. The second column should display the previous year.

In the first column, choose the characteristic **fiscal year** and assign the variable **1FY** as a value. You previously defined **1FY** as a global variable with **obligatory entry**.

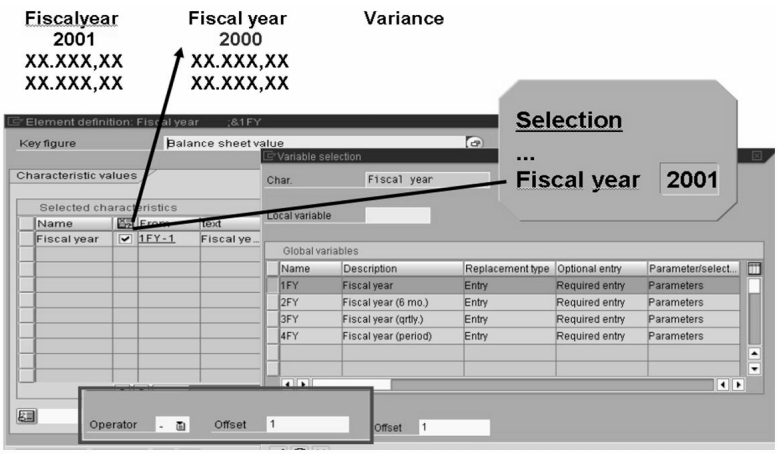

Figure 81: Variables Example: Previous Year

You can link variables for characteristic values that refer to a **numeric input field** (for example, **1FY** for current fiscal year 2001) sequentially with constants (for example: **1FY-1** for the previous year 2000). This function is supported for global and local variables for characteristic values.

You want to create a form in which the year is entered in the first column using a variable. You want to display the previous year in the second column.

In the first column, choose the characteristic **fiscal year** and assign the variable **1FY** as a value. You previously defined **1FY** as a global variable with **obligatory entry**. This display is shown in figure 86.

In the second column (as shown in figure 85), also select **fiscal year** and then specify the variable name **1FY**. Enter a minus sign (-) in the *Operator* field, and **1** in the *Offset* field. When you use the *Create report* or *Execute report* functions, the system requests only the fiscal year for variable **1FY**; it automatically determines the previous year.

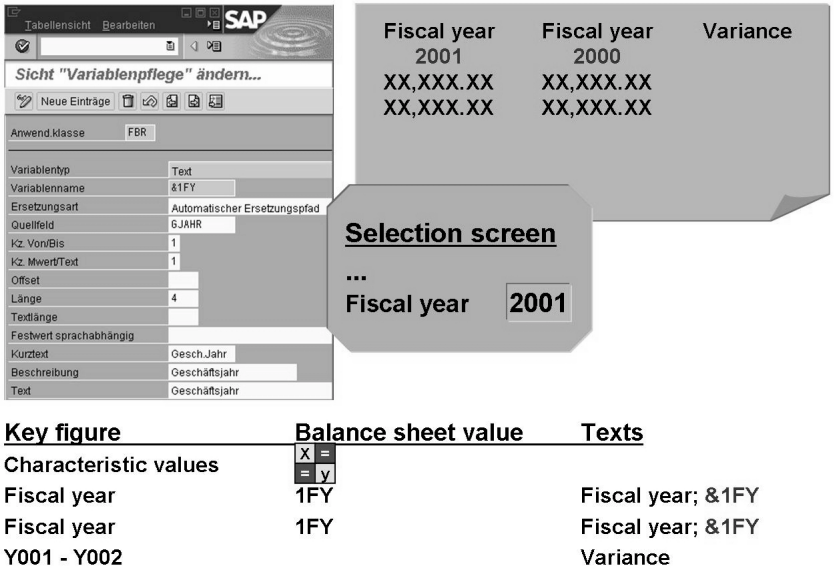

Figure 82: Variables: Texts

You can enter a short, medium, or long text for the column headings. Using the text type, you can later determine which text is used for each column. If you want to enter a two-line heading, you must separate the two lines using a semicolon (;).

If you want texts in the rows or columns to be defined by variables and not to be fixed, you have to use a text variable. Text variables are used only in form reports (in the form itself). They are replaced when you choose the *Execute report* function. You have to maintain global variables in Customizing before you can enter them in the text field of the form. For local variables, you have to enter the dollar sign ($) and an appropriate name.

For text variables, the **replacement type** determines the additional entries. You usually define an **automatic replacement path** and the text is taken from the master data. Note that text variables can only be automatically replaced if they refer to characteristics and you chose the corresponding characteristic when you defined the element. For example, you define the following for a local variable $FYT (text for fiscal year): Automatic replacement using the value in the *From* field of the characteristic *Fiscal year* (from character 1, length 4). You specify the text length when you define the variables. The maximum length of the name of a **local** variable is eight characters. For **replacement with entry**, the text length is identical to the length of the variable name.

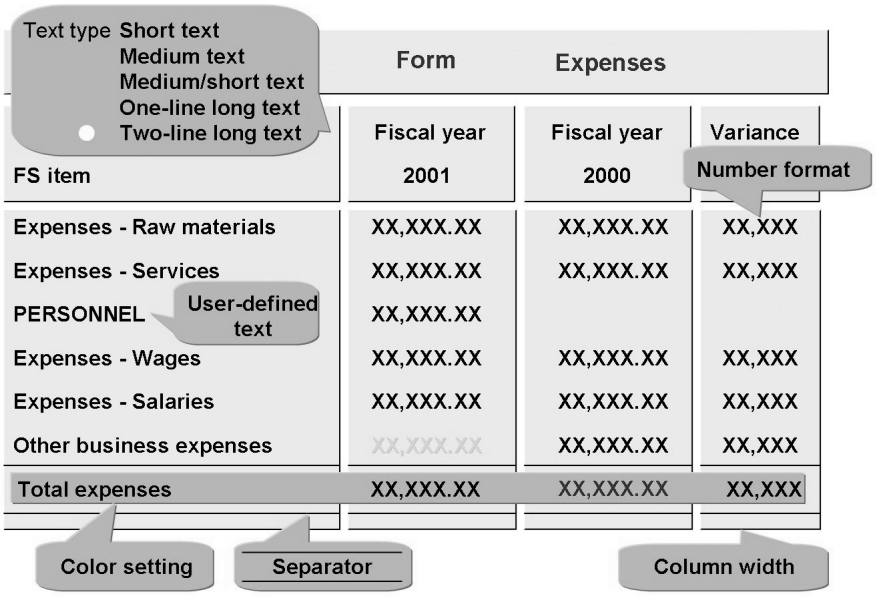

Figure 83: Layout Options in Forms

You can use several functions to define the layout of a form:

- **Color setting**: You can use this function to display a selected element in a different color.
- **Number format**: You use this function to define the scaling and the number of decimal places. Note that the definition that you make here always refers to specific rows or columns. Once you have executed a report, you can refine this definition (that is, you can make other settings for specific rows or columns).
- **Text type**: This defines which text (short, medium, or long) is displayed in the rows or columns.
- **Column width**: You use this function to change the column width. First, select the column(s) that you want to edit and then change the column width.
- You can also add separators, empty lines, and texts for emphasis.

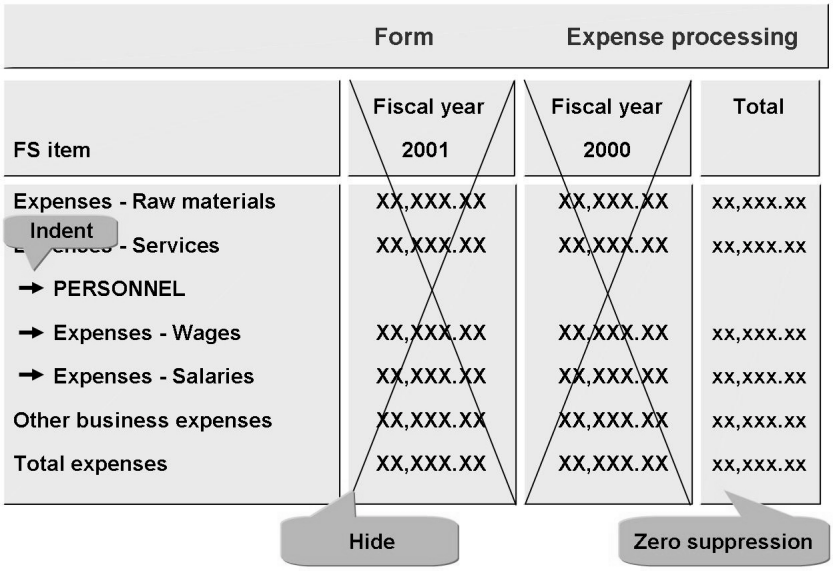

Figure 84: Layout Options in Forms (2)

Additional settings are listed below:

- **Zero suppression**: If you use this function, cells with the value zero remain empty in the report. In the form, this formatting is shown by “xxx.xxx.xxx.”
- **Indentation**: You can use this function to indent the text of individual rows, for example, to reflect a graphic sorting.
- **Hide** columns or rows: This function hides the row/column on which you place the cursor. The content of the row/column that you have hidden is retained and you can still use it in formulas. You can edit the rows that you have hidden by choosing *Hidden rows* → *Change*. You can also *delete* or *display* these rows/columns.
- **Reverse the +/- sign**: This function reverses the +/- signs in the report. Negative values are displayed positively and positive values are displayed with a minus sign. In the form, this is shown by the minus sign (-).

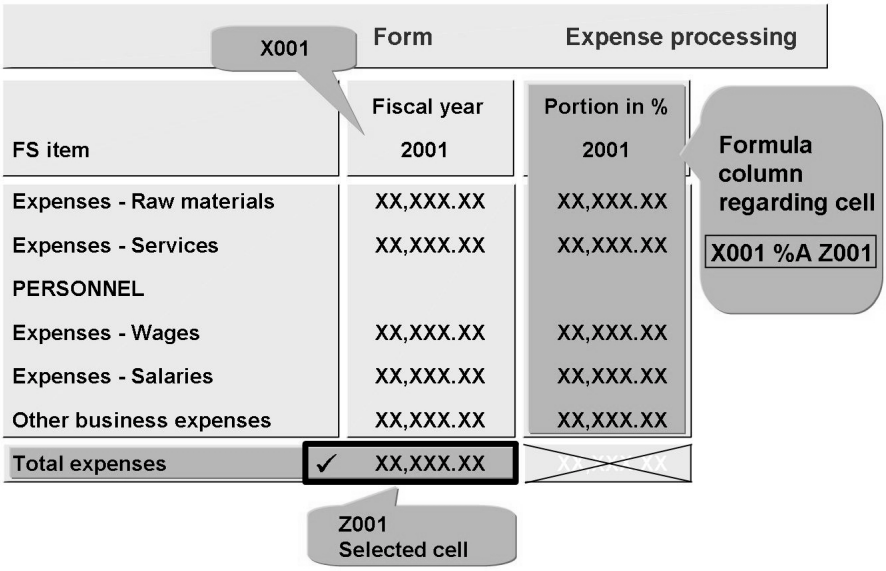

Figure 85: Cell Calculation in Forms

You can define percentages of totals for rows and columns in the form. You do this using the *Percentage of total* function when you define the formula in the formula editor.

The content of a **cell** is usually determined by the row and column for which it is the point of intersection. If this is not sufficient to determine the content, you also have to define the cell. To do this, place the cursor on a cell and choose *Edit* → *Element* → *Define element*, or double-click the cell.

If you are not actually editing the cell, but it is to be included in formulas, choose *Selected*. If you then go to the formula definition in the formula editor, the system provides the selected cells for selection.

Choose *Inactive* if you want to deactivate a cell in cases where the value is of no use. The cell is then empty, and appears as 0 (zero) in the form.

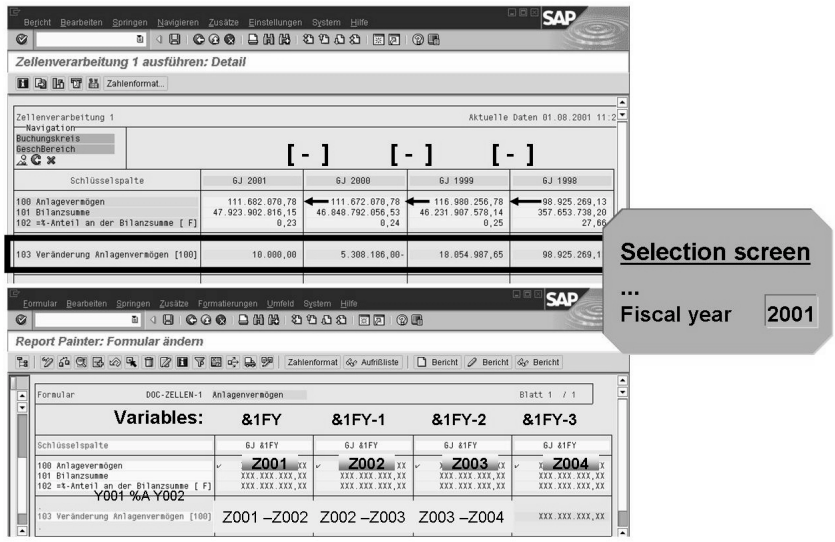

Figure 86: Cell Calculation in Forms (2)

Cell type: *Formula* : The *Formula* cell type is provided when you have defined at least one cell that can be included in the formula. If you select this cell type, the formula editor appears automatically. In the formula editor, you can define a formula based on existing cells. You use a special cell text to describe the cell.

Note that this special cell does not have to contain the value that would result from the intersection of the row and column selection.

Example of cell processing: Changing fixed assets over several years.

The result of fixed assets is retained as a cell for each fiscal year.

For the *Change to fixed assets* row, the relevant cells are linked to each other mathematically as a formula at each row/column intersection point. For example, **Z002-Z003** (in figure 91) corresponds to the subtraction of the fixed assets value for 1999 from the fixed assets value for 2000.

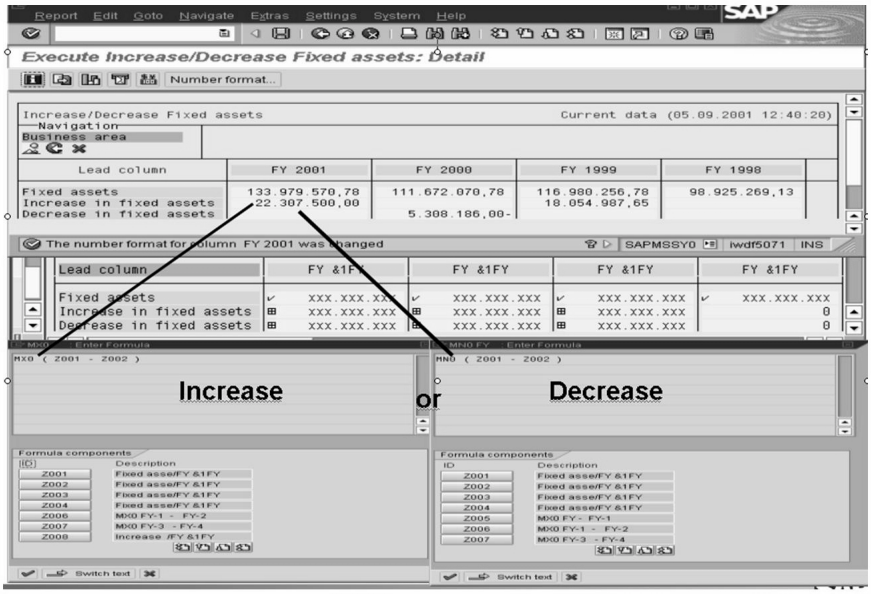

Figure 87: Cell Calculation in Forms (3)

Additional example of cell processing: Increase or decrease in fixed assets.

Formulas for increase: MX0 (Z001-Z002); MX0 (Z002-Z003); MX0 (Z003-Z004) → Maximum of operand and zero

Formulas for decrease: : MN0 (Z001-Z002); MN0 (Z002-Z003); MN0 (Z003-Z004) → Minimum of operand and zero

Exercise 8: Drilldown Reporting in Financial Accounting

Exercise Objectives

After completing this exercise, you will be able to:

- Define and execute different types of forms and reports in FI-GL
- Explain and use navigation options when you are displaying a report
- Define forms and reports more flexibly using characteristic and text variables
- Try various layout settings for the report output
- Explain the different types of cells and use cells in formulas
- Use different output types for reports and test the functions during output

Business Example

Employees in Financial Accounting want to learn about the evaluation options provided by drilldown reporting and use the various navigation options.

Task 1:

1. Create a form ***G##-BALPL-01* (## = your group number)** for the ***Reporting for Table FAGLFLEXT* form type**. Enter ***G## Act/act year* as the description**. Choose ***One axis with key figure*** as the **structure**

   User menu → AC280 Drilldown Activities →Drilldown Reporting: Maintain Forms → Create Form

   In the general selections, add the Record type **0** for actual and **Ledger 0L**.

   Edit → General data selection → General data selection

   Choose the **column display** for your entries in the form.

   Goto → Column display

   Define **3 columns**:

   Column 1:

   Key figure *BILWERT* (Balance Sheet value) with the characteristic *Fiscal year*. Enter the **current fiscal year** for the characteristic *Fiscal year* (**fixed value**). Enter *FY XXXX* (XXXX = current year) as a **short, medium, and long text**.

   Column 2:

Continued on next page

Key figure *BILWERT* (Balance Sheet value) with the characteristic *Fiscal year*. Enter the **previous fiscal year** for the characteristic *Fiscal year* (**fixed value**). Enter *FY XXXX* (XXXX = previous year) as a **short, medium, and long text**.

Column 3:

Variance between the current fiscal year and the previous fiscal year (using formula). Enter *Variance* as the **short, medium, and long text**.

Check your form

Save your form.

Task 2:

1. For this form, create the report **G##-BALPL-01 (## = group number)** for the report type *Reporting for Table FAGLFLEXT* with the description *G## Act/act year*.

   Environment → Report → Create (or Report button)

   From the **drilldown characteristics**, choose **financial statement item, company code, profit center, and account number**. You should be able to enter the **hierarchy selection (financial statement version)** using the characteristic *Financial statement item* **when you run the report**. Enter the **fixed value 1000** for the characteristic *Company code*.

   Change the **order of the user-defined characteristics**.

   Sort user-defined characteristics button, after

   Currency (1), **Currency type (2)** and **Company Code (3)** sort by:

   FS Item (4),

   Account number (5), and

   Profit center (6).

   On the *Output type* tab page, choose *Classic drilldown (Basic list: D-down)* and *Available on selection screen*.

   Save your report.

Task 3:

1. **Execute the report**:

   Exit the screen for maintaining the report.

Continued on next page

Start the report from your user menu.

Choose *Drilldown: Maintain and execute reports → Execute reports*.

Place the cursor on report **G##-BALPL-01** and choose

Drilldown report → Execute (*or* double-click your report) **G##-BALPL-01**.

Currency type: 10

The FIS Annual Rep.Structure: INT:

Output type: **Classic drilldown report**

Execute

Navigate within the report until you find the account number for **office supplies**. Make a note of the financial statement value for the **Profit center Motorcycles (1000)** for the **current fiscal year**.

_____

_____

Task 4:

1. Create a form *G##-BALPL-02* (## = your group number) for the form type *Reporting for Table FAGLFLEXT*. Enter *G## Act/act year var.* as the description. Choose *One axis with key figure Create* as the structure.

   User menu → AC280 Drilldown Activities →Drilldown Reporting: Maintain Forms → Create Form

   In the **general selections**, add the **Record type 0** for **actual** and **Ledger 0L**.

   Edit → General data selection → General data selection

   Choose the column display for your entries in the form.

   Goto → Column display

   The form should have the same **structure as your first form**.

   Column 1:

   Key figure BILWERT (balance sheet value) with the characteristic *Fiscal year*. Enter the **global variable 1FY** for the characteristic *Fiscal year*.

   Enter the **text**:

   Short: FY *&1FY* and click *Copy short text*.

   Column 2:

Continued on next page

Key figure BILWERT (Balance Sheet value) with the characteristic *Fiscal year*. For the fiscal year, enter the **global variables 1FY** and in the *As operator* field, enter a hyphen (–) and *Offset 1*. Enter the **text**:

Short: ***FY &1FY*** and choose ***Copy short text***.

Column 3:

Variance between the current fiscal year and the previous fiscal year (using formula). Enter *Variance* as the **short, medium, and long text**.

Check your form.

Save your form.

Task 5:

1. Create report G##-BALPL-02:

   On the maintenance screen for the form:

   Environment → Report → Create (or Report button)

   For the form you have just created, create the report *G##-BALPL-02 (## = group number)* for the report type **Reporting for Table FAGLFLEXT** with the description *G## Act year var*.

   Select the drilldown characteristics **FS Item, Company code**, **Profit Center** and **Account number**.

   Enter *INT* for the **financial statement version**.

   (**Double-click the characteristic *Financial statement item***).

   Change the **order of the user-defined characteristics** by choosing *Sort user-defined characteristics*.

   After **Currency (1)** and **Currency type (2)**

   Sort by **FS Item (3)**

   Company code (4)

   Account number (5), and

   Profit center (6).

   Choose *Classic drilldown (Basic list: drilldown)* as the **output type** and *Available on selection screen*.

   Enter the *Current fiscal year* as the default value for the **fiscal year**. (*Variables* tab page)

   Save your report.

Continued on next page

2. Execute the report:

   Exit the maintenance screen for the report.

   Start the report from your user menu.

   Choose ***Drilldown: Maintain and execute reports → Execute reports***.

   Double-click report *G##-BALPL-02*.

   Accept the *current* fiscal year. You want to display the financial statement values for currency type *10* and company code *1000*.

   Execute

   When you display the report, navigate using the characteristics *Profit center, Account number*, and *Financial statement item*.

3. Execute this report again. On the selection screen, enter the *previous year* as the fiscal year.

Task 6:

Key figures report

1. Create form:

   Once you have completed the form, it should look as follows:

Assets	**Fiscal year 2009**	**Fiscal year 2008**	**Fiscal year 1999**
Fixed assets	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx
Financial statements total	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx
% financial statement total	xx.xx	xx.xx	xx.xx

   Example: The **current** fiscal year in the above report is **2009**.

   Note:

   You want to determine the values for the characteristic **Fiscal year** and the **texts** in which the fiscal years are displayed using *local variables*.

   In the form, define the characteristic variable *FY* and the text variable *FY*.

   User menu → Drilldown Reporting: Maintain Forms→ Create form

   Create a form *G##-BILKENN1* (## = your group number) for the *Reporting for Table FAGLFLEXT* form type.

Continued on next page

Enter ***G## Asset proportion*** **as the description**.

Choose the **structure** ***Two axes (matrix)***.

Edit → General data selection → General data selection

The general selections should contain the characteristic **Financial statement version** with the value *INT,* the characteristic **Record Type *0* (actual)** and **Ledger *0L***.

Columns

You want to determine the values for the **fiscal year** and the texts in which fiscal years are displayed, using *local* variables. In the form, define the **characteristic variable *FY*** and the **text variable *FY***.

Create the **first column** (column 1):

Element type: *Key figures with characteristics*

Key figure: BILWERT (Balance sheet value)

Characteristic: Fiscal year

Local variable **FY**

(this ensures that you can subsequently enter the fiscal year on the selection screen)

Text for column 1: Short, **FY1 $FY**; Medium, **FiscYr $FY**; Long, **Fiscal year ; $FY**

Enter

Confirm

The width of this column should be **19**.

Place the cursor on the column and choose:

Formatting → Column → Column width

Enter

To copy the **formatting**, and the **content** of the **first column to the second column**, place the cursor on the first column and click on the icon *select*.

Place the cursor on the second column and click . Copy the **formatting**, and the content of the **first column to the third column** the same way.

You now have to change the **second column**:

Edit → Element → Change

Double-click the variable *FY*

Local variable *FY* with *Operator* – and *Offset* 1

Continued on next page

***Change short, medium, and long texts* button**

Text for column 2: Short, **FY2 $FY**; Medium, **FiscYr $FY**; Long, **Fiscal year ; $FY**

You now have to change your **third column**:

Edit → Element → Change

Double-click the variable *FY*

Local variable *FY* with ***Operator*** – and ***Offset 2***

Choose *Change short, medium, and long texts*

Text for column 3: Short, **FY3 $FY**; Medium, **FiscYr $FY**; Long, **Fiscal year ; $FY**

You can now change the *Text type* for all columns:

Formatting → All columns → Text lengths

Select *Two-line long text*.

The values in all columns should have **2 decimal places**.

Place the cursor **on each column** and choose:

Formatting → Number format (or the *Number format* button)

Choose the **format 0.00 for decimal places**.

You now have to define the variables you used; **FY** as a **characteristic variable** and **FY** as a **text variable**:

Extras → Variables → Variable definition

Enter *Fiscal year* as the description for your **variable for the characteristic value** (this is the text that subsequently appears on the selection screen).

Enter *Fiscal year text* as a **description** for your **text variable**

Double-click *text variable* FY and enter the following:

Replace selected field: *Automatically*

Selected characteristic: *RYEAR*

Replace selected field: *From field*

Replace selected characteristic value/text with: *Characteristic value*

Selected field: *Offset 1 Length 4*

This ensures that the fiscal year (e.g., 2001) is actually displayed as 2001 in the column heading of your list.

To **increase** the **key column width**, place the cursor on the key column.

Continued on next page

Formatting → Column → Column width

Enter *30* as the column width.

Rows

1. Configure long text for all rows:

Formatting → All rows → Text lengths

Choose *One-line long text* as the text type.

2. Enter the text **Assets** in the first row.

Edit → Rows → Insert row;**then *Edit → Rows → Insert text: Assets***

3. Separator

Edit → Rows → Insert dividing line

Enter the character - - as an **underscore** for the separator.

In the following dialog box containing the **query: *Should the underscore appear only in the value columns?***, choose ***No***

4. **Financial statement items 1010000, 1020000, and 1030000**, which are to be inserted individually as rows. The total for all three will then be created in a formula and then the three individual rows hidden.

Place the cursor on the row beneath the separator.

Edit → Element → Insert element (or double-click this row)

Element type: *Characteristic overview* (selection button)

FS Item as a **characteristic in the *Selected characteristics* list**

Enter the **FS Items 1010000, 1020000, and 1030000** each individually one after the other as rows and keep the texts for them as offered. To be able to enter these Items you have to, each time, choose the Hierarchy icon below "Change hierarchy node entry" and then enter the FS Item number or use the matchcode button to navigate down and choose the Item number that way. Finally, choose Confirm to bring the Item with its description into the formula row.

After these three rows, insert a Formula row with the addition of these three rows.

Texts for the Formula row:

Short: Assets; Medium: Fixed assets; Long: Fixed assets.

You should then HIDE the 3 rows containing the FS Items 1010000, 1020000 and 1030000. To do this place the cursor on each of these rows and then choose *Edit → Rows → Hide*.

Continued on next page

5. Financial statement item 1000000 *ASSETS* for the *Financial statement total* row:

Edit → Element → Insert element (or double-click this row)

Element type: *Characteristic overview* (selection button)

Financial statement item as a **characteristic in the *Selected characteristics* list. Choose the Hierarchy icon below "Change hierarchy node entry" and then enter the**

FS item 1000000

Texts for the element definition:

Short: *FSTotal*; Medium: *FS Total*; Long: *Financial Statement total*

6. Separator

Edit → Rows → Insert dividing line

Enter the character - - as an **underscore** for the separator.

In the following dialog box containing the query: *Should the underscore appear only in the value columns?*, choose *No*

Formula for the *% financial statement total* row (Y001 %A Y002):

***Edit → Element → Insert element* (or double-click this row)**

Element type: Formula (selection button)

Formula: *Y001 %A Y002*

Texts: short: % *Portion*; Medium *% financial statement total*; Long: *% portion financial statement.*

This row should be ***displayed*** in a different color to the other rows.

Formatting → Color setting: Color for totals

Check your form.

Save your form.

Task 7:

1. **Create report for key figures:**

   For this form, create the report *G##-BILKENN1* (## = group number) for report type *Reporting for Table FAGLFLEXT* with the description *G## Asset proportion*.

   ***Environment → Report → Create* (or *Report* button)**

Continued on next page

Choose *Company code* and *Profit center* as **drilldown characteristics**.

On the **Output type** tab page, choose *Classic drilldown reporting* (*Basic list: Detail*) and *Available on selection screen*.

Save your report.

Task 8:

1. **Execute the report:**

   Exit the maintenance screen for the report.

   Exit the maintenance screen for the form.

   Start the report from your user menu.

   Choose ***Drilldown: Maintain and execute reports → Execute reports***.

   G##-BILKENN1 drilldown report → Execute

   (or double-click report G##-BILKENN1).

   On the selection screen enter:

   Currency type: 10

   You can keep the **current** Fiscal Year which is offered. to you.

   Execute

   Drill the report down by profit center values.

Task 9:

1. Create a form *G##-BILKENN2* (## = your group number) for the *Reporting for Table FAGLFLEXT* form type.

   User menu → Drilldown reporting: Maintain forms → Create form

   Use form *G##-BILKENN1* as a **template**. Enter *G## Change: F.Assets* as the description.

   The form should be structured as follows:

Continued on next page

Assets	Fiscal year 2009	Fiscal year 2008	Fiscal year 2007	Fiscal year 2006
Fixed assets Financial statements total	xx,xxx.xx xx,xxx.xx	xx,xxx.xx xx,xxx.xx	xx,xxx.xx xx,xxx.xx	xx,xxx.xx
% financial statement total <Empty row> <Empty row>	xx.xx	xx.xx	xx.xx	
Change to fixed assets	xx.xx	xx.xx	xx.xx	

Example: The **current** fiscal year in the above report is **2009**.

Note:

New column:

Add the fourth column for the fiscal year - 3. The value and the text of the fiscal year for the fourth column are to be derived in the same way as the other columns in the previous form.

To copy this formatting and the content of the third column for this fourth column, place the cursor on the third column and click on the icon *Select*

Place the cursor on the fourth column and click.

You now have to change your fourth column:

Local variable **FY** with **Operator** – and **Offset 3**

Text for column 2: Short: **FY4 $FY**

Medium: **FsclYear $FY**

Long: **Fiscal year; $FY**

The fourth column (fiscal year - 3) should now **only** show the **fixed assets**.

Deactivate the corresponding cells:

(Row: Financial statement total <> Column: FY4 $FY) Define the cell type as *Inactive*.

(Row: % financial statement total <> Column: FY4 $FY) Define the cell type as *Inactive*.

Continued on next page

New rows:

After the *% financial statements total* row, you want to display **two empty rows** and then a **separator**.

The next row should show the **change to fixed assets**, but **only** for the current year, the previous year, and the year before last.

Procedure

To enable you to recognize the corresponding columns in your cell names, you have to change the text type for all columns:

Formatting → All columns → Text lengths Text type: Short text

Select the corresponding cells: Fixed assets for FY1 $FY,

Fixed assets for FY2 $FY,

Fixed assets for FY3 $FY,

Fixed assets for FY4 $FY,

Place the cursor three rows beneath the entry *% financial statement total*, and add a separator.

Edit → Rows → Insert dividing line

Enter - - as the character for the **separator**. The separator should appear **across the entire form**.

In the **row after the separator**, choose *Formula* and enter your formula component, for example **Y001**.

Enter the texts: Short: *Change*. Medium *Change*. Long *Change fixed assets*.

To determine the **Change to fixed assets**, you have to enter the **formulas**:

	FY1 $FY	**FY2 $FY**	**FY3 $FY**
Change to fixed assets	**Assets /FY1 $FY– Assets /FY2 $FY**	**Assets /FY2 $FY – Assets /FY3 $FY**	**Assets /FY3 $FY– Assets /FY4 $FY**
Text: Short, medium, long	Change FY1	Change FY2	Change FY3

First select the cells in the *Fixed assets* row. These are the cells:

Fixed assets row, Column FY1 $FY;

Edit → Element → Change: Selected

Continued on next page

Fixed assets row, Column FY2 $FY;

Edit → Element → Change: Selected

Fixed assets row, Column FY3 $FY;

Edit → Element → Change: Selected

Fixed assets row, Column FY4 $FY;

Edit → Element → Change: Selected

The change to fixed assets should **only** be for the current year, the previous year, and the year before last. Edit the corresponding cells by entering the **formula for calculating fixed assets**. Choose *Change FYX* (X = year 1, 2, 3) as texts.

In the cell for the row *Change to fixed assets* and the column *FY4 $FY*, choose *Inactive* as the **cell type**.

To have two-line headings for your columns, you have to change the text type for all columns:

Formatting → All columns → Text lengths

Enter *Two-line long text*.

Check your form.

Save your form.

Task 10:

1. For this form, create the **report G##-BILKENN2** (## = group number) for **the *Reporting for table FAGLFLEXT form type*** with the description *G## Change: fixed assets*.

   On the maintenance screen for the form, choose:

   Environment → Report → Create (or *Report* pushbutton)

   Choose **Company code and Profit center** as **drilldown characteristics**. On the *Output type* tab page, choose *Classic drilldown (Basic list: Detail)* and *Available on selection screen*.

   Save your report.

Task 11:

1. Execute your report. Exit the maintenance screen for the report by choosing *Exit*. Start the report from your user menu.

Continued on next page

Choose ***Drilldown: Maintain and execute reports → Execute reports***.Choose report *G##-BILKENN2*. You want to display the financial statement values for the **currency type 10** and company code *1000* for the current fiscal year

Solution 8: Drilldown Reporting in Financial Accounting

Task 1:

1. Create a form ***G##-BALPL-01* (## = your group number)** for the ***Reporting for Table FAGLFLEXT* form type**. Enter ***G## Act/act year* as the description**. Choose ***One axis with key figure*** as the **structure**

   User menu → AC280 Drilldown Activities →Drilldown Reporting: Maintain Forms → Create Form

   In the general selections, add the Record type **0** for actual and **Ledger 0L**.

   Edit → General data selection → General data selection

   Choose the **column display** for your entries in the form.

   Goto → Column display

   Define **3 columns**:

   Column 1:

   Key figure *BILWERT* (Balance Sheet value) with the characteristic *Fiscal year*. Enter the **current fiscal year** for the characteristic *Fiscal year* (**fixed value**). Enter *FY XXXX* (XXXX = current year) as a **short, medium, and long text**.

   Column 2:

   Key figure *BILWERT* (Balance Sheet value) with the characteristic *Fiscal year*. Enter the **previous fiscal year** for the characteristic *Fiscal year* (**fixed value**). Enter *FY XXXX* (XXXX = previous year) as a **short, medium, and long text**.

   Column 3:

   Variance between the current fiscal year and the previous fiscal year (using formula). Enter *Variance* as the **short, medium, and long text**.

   Check your form

   Save your form.

   a) **Procedure:**

      In your user menu, choose transaction *FGI4 - Create form* in the folder *Drilldown reporting: Maintain forms*.

      User menu → Drilldown reporting: Maintain forms → Create form

Continued on next page

In the general selections, add the Record Type **0** for actual and **Ledger 0L**.

Edit → General data selection → General data selection

Click **Record type** in the list of *available characteristics* and then click the arrow pointing left to add this characteristic to the list of *selected characteristics*. Enter **0** as the From value. Click **Ledger** in the list of available characteristics and then click the arrow pointing left to add this characteristic to the list of selected characteristics. Enter **0L** as the **From Value**. Choose *Confirm*.

Choose the column display for your entries in the form.

Goto → Column display

First column:

Double-click the **first column *(element 1)*** and choose ***Key figure with characteristics* (selection button)**. Choose **BILWERT (Balance Sheet Value)** as the **key figure**. Select **Fiscal year** in the list of *Available characteristics* and choose the arrow pointing left to add this **characteristic** to the list of *Selected characteristics*. Enter the **current fiscal year (XXXX)** as the *From* value.

Enter the **texts** by choose the *Change short/medium/long text* symbol. Enter the text: **Short: *GJ XXXX*** (XXXX = current year) and then choose the *Copy short text* pushbutton. Accept your entry and then choose ***Confirm***.

Second column:

Double-click the **second column (element 2)** and choose ***Key figure with characteristics* (selection button)**. Choose **BILWERT (Balance Sheet Value)** as the key figure. Click **Fiscal year** in the **list of *available characteristics*** and then click the arrow pointing left to add this **characteristic** to the **list of *selected characteristics***. Enter the **previous fiscal year (YYYY)** as the *From* value.

Enter the texts for the element definition:

Choose the *Change short, medium and long texts* symbol. Enter the text: **Short: *GJ YYYY* (YYYY = previous year) and then choose the *Copy short text* pushbutton.**

Accept your entry and then choose ***Confirm***.

Third column:

Double-click the **third column *(element 3)*** and choose ***Formula* (selection button)**. Enter your **calculation formula**.

Continued on next page

Click the ID **X001**, the **minus sign**, and then the ID **X002**. Accept your entries.

Enter the **texts for the element definition**:

Enter the **text**: **Short:** ***Variance***, and then choose ***Copy short text***. Accept your entry and then choose ***Confirm***.

Check your **form**: Choose *Check*.

Save your form.

Task 2:

1. For this form, create the report **G##-BALPL-01 (## = group number)** for the report type *Reporting for Table FAGLFLEXT* with the description *G## Act/act year*.

   Environment → Report → Create (or Report button)

   From the **drilldown characteristics**, choose **financial statement item, company code, profit center, and account number**. You should be able to enter the **hierarchy selection (financial statement version)** using the characteristic *Financial statement item* **when you run the report**. Enter the **fixed value 1000** for the characteristic *Company code*.

   Change the **order of the user-defined characteristics**.

   Sort user-defined characteristics button, after

   Currency (1), **Currency type (2)** and **Company Code (3)** sort by:

   FS Item (4),

   Account number (5), and

   Profit center (6).

   On the *Output type* tab page, choose *Classic drilldown (Basic list: D-down)* and *Available on selection screen*.

Continued on next page

Save your report.

a) **Procedure:**

Create report **G##-BALPL-01** (## = group number) for this form. On the maintenance screen *form →change*:

Environment → Report → Create (or choose *Create report*).

Choose the **report type *Reporting for Table FAGLFLEXT***.

For your **report G##-BALPL-01**, accept the same form name offered and enter ***G## Act/act year* for the report description**.

Choose ***Create***.

In the ***Available characteristics* list** , click

Financial statement item, company code, profit center and **account number** continue, and click the arrow pointing left to add these characteristics to the ***Selected characteristics*** list.

Double-click the characteristic **Financial statement item** and choose ***Enter at execution* (selection button)**.

Enter the fixed value **1000** for the characteristic *Company code*.

Change the **order of the user-defined characteristics**:

Click ***Sort user-defined characteristics*** and enter

FS Item (4),

Account number (5), and

Profit center (6).

On the *Output type* tab page, choose *Classic drilldown (Basic list: drilldown)* and select the *Available on selection screen* checkbox.

Save your report.

Task 3:

1. **Execute the report**:

Exit the screen for maintaining the report.

Start the report from your user menu.

Choose *Drilldown: Maintain and execute reports → Execute reports*.

Place the cursor on report **G##-BALPL-01** and choose

Drilldown report → Execute (*or* double-click your report) **G##-BALPL-01**.

Continued on next page

Currency type: 10

The FIS Annual Rep.Structure: INT:

Output type: **Classic drilldown report**

Execute

Navigate within the report until you find the account number for **office supplies**. Make a note of the financial statement value for the **Profit center Motorcycles (1000)** for the **current fiscal year**.

Continued on next page

a) **Procedure:**

Execute your report:

Exit the maintenance screen for the report by choosing *Exit* until you see your user menu on the screen.

Start the report from your user menu.

Drilldown: Maintain and execute reports → Execute reports: Report:G##-BALPL-01→Drilldown report → Execute (or double-click your report G##-BALPL-01)

On the selection screen:

Currency type *10* and **The financial statement version *INT*** and

Output type: *Classic drilldown report*

Execute

When you output the report, the financial statement items for the financial statement version INT are displayed in the rows.

Navigate within the report until you find the account number for **office supplies**:

In the **navigation area**, click the drilldown characteristic ***Account number***.

Choose ***Financial statement item.***

This produces the **drilldown by account number**.

Scroll down the list until you find the **office supplies** account**476000**. Alternatively, you can use the binoculars icon to search for the term *Off*.

Make a note of the financial statement value for the ***Profit center*** **Motorcycles (1000)** for the **current fiscal year**:

Select the **Office supplies** row by choosing the **angle brackets icon (<>)** .

In the navigation area, click the **Profit center** drilldown characteristic. The **report values** for **account number 476000 (Office supplies)** are now drilled down by profit center. Make a note of the **financial statement value** for the combination **Account number 476000 (Office supplies)** for the **Motorcycles** Profit center (1000) in the ***current fiscal year***.

Continued on next page

Task 4:

1. Create a form *G##-BALPL-02* (## = your group number) for the form type *Reporting for Table FAGLFLEXT*. Enter *G## Act/act year var.* as the description. Choose *One axis with key figure Create* as the structure.

   User menu → AC280 Drilldown Activities →Drilldown Reporting: Maintain Forms → Create Form

   In the **general selections**, add the **Record type 0** for **actual** and **Ledger 0L**.

   Edit → General data selection → General data selection

   Choose the column display for your entries in the form.

   Goto → Column display

   The form should have the same **structure as your first form**.

   Column 1:

   Key figure BILWERT (balance sheet value) with the characteristic *Fiscal year*. Enter the **global variable 1FY** for the characteristic *Fiscal year*.

   Enter the **text**:

   Short: FY *&1FY* and click *Copy short text*.

   Column 2:

   Key figure BILWERT (Balance Sheet value) with the characteristic *Fiscal year*. For the fiscal year, enter the **global variables 1FY** and in the *As operator* field, enter a hyphen (–) and *Offset 1*. Enter the **text**:

   Short: ***FY &1FY*** and choose ***Copy short text***.

   Column 3:

   Variance between the current fiscal year and the previous fiscal year (using formula). Enter *Variance* as the **short, medium, and long text**.

   Check your form.

   Save your form.

   a) **Procedure:**

      Form for financial statement analysis:

      In your user menu, click transaction *FGI4 - Create form* in the *Drilldown reporting: Maintain forms* folder.

      User menu → AC280 Drilldown Activities →Drilldown Reporting: Maintain Forms → Create Form

Continued on next page

Enter the **form type** ***Reporting for Table FAGLFLEXT***,

Form: ***G##-BALPL-02***(##=group number) and

Description: ***G## Act/act year var***.

Structure: ***One axis with key figure***

In the general selections, add the **Record Type 0** for **actual** and **Ledger 0L**.

Edit → General data selection → General data selection

Click **Record type** in the ***Available characteristics*** **list** and then click the arrow pointing left to add this **characteristic to the** ***Selected characteristics*** **list**.Enter **0** as the **From** value. Click Ledger in the list of available characteristics and then click the arrow pointing left to add this characteristic to the list of selected characteristics. Enter **0L** as the From value.

Choose *Confirm*.

Confirm

Choose the column display for your entries in the form.

Goto → Column display

First column:

Place the cursor on the **first column** ***(Element 1)*** and

choose *Edit → Element → Change (or double-click element 1)*.

Choose ***Key figure with characteristics*** **(selection button)**.

Choose *BILWERT* (Balance Sheet value) for the **key figure** and add the characteristic *Fiscal year*. Place the cursor on **Fiscal year** in the *Available characteristics* list and choose the arrow pointing left to add this characteristic to the *Selected characteristics* list.

Choose the **global variable 1FY** (fiscal year) as a *Variable* (select *Variable checkbox*) by **selecting 1FY** and choose *Enter*.

Enter the **texts for the element definition**:

Choose *Change short, medium and long texts*.

Enter the **text**: Short: FY *&1FY* and choose *Copy short text*.

Accept your entry and then choose ***Confirm***.

Second column:

Place the cursor on the **second column (Element 2)** and

choose ***Edit → Element → Change (or double-click element 2)***.

Continued on next page

Choose ***Key figure with characteristics*** **(selection button)**.

Choose *BILWERT* (Balance Sheet value) for the **key figure** and add the characteristic *Fiscal year*. Place the cursor on **Fiscal year** in the *Available characteristics* list and choose the arrow pointing left to add this characteristic to the *Selected characteristics* list.

Choose the **global variable 1FY** (fiscal year) as a *Variable* (select *Variable checkbox*) by **selecting 1FY**.

Also enter a hyphen (–) in the ***As operator*** field and 1 (one) in the ***As Offset*** field. Choose ***Enter***.

Enter the **texts for the element definition**:

Choose ***Change short, medium and long texts***.

Enter the **text**: Short: **FY *&1FY*** and choose ***Copy short text***.

Accept your entry and then choose ***Confirm***.

Third column:

Place the cursor on the **third column *(Element 3)*** and

choose ***Edit → Element → Change (or double-click element 3)***.

Choose **Formula (selection button)**.

Enter your **formula**.

Click the ID **X001**, the **minus sign**, and then the ID **X002**. Accept your entries.

Enter the **texts for the element definition**:

Enter the **short text**: ***Variance***, and then choose ***Copy short text***.

Accept your entry and then choose ***Confirm***.

Check your form.

Save your form.

Task 5:

1. Create report G##-BALPL-02:

   On the maintenance screen for the form:

   Environment → Report → Create (or Report button)

Continued on next page

For the form you have just created, create the report *G##-BALPL-02 (## = group number)* for the report type **Reporting for Table FAGLFLEXT** with the description *G## Act year var*.

Select the drilldown characteristics **FS Item, Company code**, **Profit Center** and **Account number**.

Enter *INT* for the **financial statement version**.

(**Double-click the characteristic *Financial statement item***).

Change the **order of the user-defined characteristics** by choosing *Sort user-defined characteristics*.

After **Currency (1)** and **Currency type (2)**

Sort by **FS Item (3)**

Company code (4)

Account number (5), and

Profit center (6).

Choose *Classic drilldown (Basic list: drilldown)* as the **output type** and *Available on selection screen*.

Enter the *Current fiscal year* as the default value for the **fiscal year**. (*Variables* tab page)

Continued on next page

Save your report.

a) **Procedure:**

Create report G##-BALPL-02:

On the maintenance screen for the form:

Environment → Report → Create (or Report button)

For the form you have just created, create the **report *G##-BALPL-02 (## = group number)*** for **report type *Reporting for Table FAGLFLEXT*** with the **description *G## Act year var***.

Select the drilldown characteristics *Financial statement item, Company code, Profit center, and Account number*.

Enter INT for the **financial statement version**:

Double-click the characteristic *Financial statement item* and choose financial statement version *INT*.

Change the **order of the user-defined characteristics** by choosing ***Sort user-defined characteristics***.

By **FS Item (3)**

by **Company code (4)**,

Account number (5), and

Profit Center (6).

On the *Variables* tab page, define the *current fiscal year* as the **variable value**.

On the *Output type* tab page, choose *Classic drilldown (Basic list: drilldown)* and *Available on selection screen*.

Save

2. Execute the report:

Exit the maintenance screen for the report.

Start the report from your user menu.

Choose ***Drilldown: Maintain and execute reports → Execute reports***.

Double-click report *G##-BALPL-02*.

Accept the *current* fiscal year. You want to display the financial statement values for currency type *10* and company code *1000*.

Execute

Continued on next page

When you display the report, navigate using the characteristics *Profit center, Account number*, and *Financial statement item*.

a) **Procedure:**

Execute the report

Exit the maintenance screen for the report. Start the report from your user menu.

Choose ***Drilldown: Maintain and execute reports → Execute reports***.

Place the cursor on the report G##-BALPL-02 (## = group number) that you created.

Drilldown report → Execute

(or double-click the report **G##-BALPL-02**). *On the selection screen*:

***Current* fiscal year**

Company code: ***1000***

Currency type **10**

Execute.

When you output the report, the financial statement items for the financial statement version INT are displayed in the rows. The columns contain the current fiscal year, the previous year, and the variance.

When you display the report, navigate using the characteristics *Profit Center, Account number* and *Financial statement item*.

3. Execute this report again. On the selection screen, enter the *previous year* as the fiscal year.

a) On the selection screen, enter the PREVIOUS fiscal year.

Execute.

When you display the report, the financial statement items for the financial statement version INT are displayed in the rows. The columns contain the previous year, the year before last, and the variance.

Task 6:

Key figures report

1. Create form:

Once you have completed the form, it should look as follows:

Continued on next page

Assets	Fiscal year 2009	Fiscal year 2008	Fiscal year 1999
Fixed assets	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx
Financial statements total	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx
% financial statement total	xx.xx	xx.xx	xx.xx

Example: The **current** fiscal year in the above report is **2009**.

Note:

You want to determine the values for the characteristic **Fiscal year** and the **texts** in which the fiscal years are displayed using *local variables*.

In the form, define the characteristic variable *FY* and the text variable *FY*.

User menu → Drilldown Reporting: Maintain Forms→ Create form

Create a form *G##-BILKENN1* (## = your group number) for the *Reporting for Table FAGLFLEXT* form type.

Enter ***G## Asset proportion*** **as the description**.

Choose the **structure *Two axes (matrix)***.

Edit → General data selection → General data selection

The general selections should contain the characteristic **Financial statement version** with the value *INT,* the characteristic **Record Type *0* (actual)** and **Ledger *0L***.

Columns

You want to determine the values for the **fiscal year** and the texts in which fiscal years are displayed, using *local* variables. In the form, define the **characteristic variable *FY*** and the **text variable *FY***.

Create the **first column** (column 1):

Element type: *Key figures with characteristics*

Key figure: BILWERT (Balance sheet value)

Characteristic: Fiscal year

Local variable **FY**

(this ensures that you can subsequently enter the fiscal year on the selection screen)

Continued on next page

Text for column 1: Short, **FY1 $FY**; Medium, **FiscYr $FY**; Long, **Fiscal year ; $FY**

Enter

Confirm

The width of this column should be **19**.

Place the cursor on the column and choose:

Formatting → Column → Column width

Enter

To copy the **formatting**, and the **content** of the **first column to the second column**, place the cursor on the first column and click on the icon *select*.

Place the cursor on the second column and click . Copy the **formatting**, and the content of the **first column to the third column** the same way.

You now have to change the **second column**:

Edit → Element → Change

Double-click the variable *FY*

Local variable *FY* with *Operator* – and *Offset* 1

***Change short, medium, and long texts* button**

Text for column 2: Short, **FY2 $FY**; Medium, **FiscYr $FY**; Long, **Fiscal year ; $FY**

You now have to change your **third column**:

Edit → Element → Change

Double-click the variable *FY*

Local variable *FY* with ***Operator*** – and ***Offset 2***

Choose *Change short, medium, and long texts*

Text for column 3: Short, **FY3 $FY**; Medium, **FiscYr $FY**; Long, **Fiscal year ; $FY**

You can now change the *Text type* for all columns:

Formatting → All columns → Text lengths

Select *Two-line long text*.

The values in all columns should have **2 decimal places**.

Place the cursor **on each column** and choose:

Formatting → Number format (or the *Number format* button)

Continued on next page

Choose the **format 0.00 for decimal places**.

You now have to define the variables you used; **FY** as a **characteristic variable** and **FY** as a **text variable**:

Extras → Variables → Variable definition

Enter *Fiscal year* as the description for your **variable for the characteristic value** (this is the text that subsequently appears on the selection screen).

Enter *Fiscal year text* as a **description** for your **text variable**

Double-click *text variable* FY and enter the following:

Replace selected field: ***Automatically***

Selected characteristic: ***RYEAR***

Replace selected field: ***From field***

Replace selected characteristic value/text with: ***Characteristic value***

Selected field: ***Offset 1 Length 4***

This ensures that the fiscal year (e.g., 2001) is actually displayed as 2001 in the column heading of your list.

To **increase** the **key column width**, place the cursor on the key column.

Formatting → Column → Column width

Enter *30* as the column width.

Rows

1. Configure long text for all rows:

Formatting → All rows → Text lengths

Choose *One-line long text* as the text type.

2. Enter the text **Assets** in the first row.

Edit → Rows → Insert row;**then** ***Edit → Rows → Insert text: Assets***

3. Separator

Edit → Rows → Insert dividing line

Enter the character - - as an **underscore** for the separator.

In the following dialog box containing the **query:** ***Should the underscore appear only in the value columns?***, choose ***No***

4. **Financial statement items 1010000, 1020000, and 1030000**, which are to be inserted individually as rows. The total for all three will then be created in a formula and then the three individual rows hidden.

Continued on next page

Place the cursor on the row beneath the separator.

Edit → Element → Insert element (or double-click this row)

Element type: ***Characteristic overview*** **(selection button)**

FS Item as a **characteristic in the** ***Selected characteristics*** **list**

Enter the **FS Items 1010000, 1020000, and 1030000** each individually one after the other as rows and keep the texts for them as offered. To be able to enter these Items you have to, each time, choose the Hierarchy icon below "Change hierarchy node entry" and then enter the FS Item number or use the matchcode button to navigate down and choose the Item number that way. Finally, choose Confirm to bring the Item with its description into the formula row.

After these three rows, insert a Formula row with the addition of these three rows.

Texts for the Formula row:

Short: Assets; Medium: Fixed assets; Long: Fixed assets.

You should then HIDE the 3 rows containing the FS Items 1010000, 1020000 and 1030000. To do this place the cursor on each of these rows and then choose *Edit → Rows → Hide*.

5. Financial statement item 1000000 *ASSETS* for the *Financial statement total* row:

Edit → Element → Insert element (or double-click this row)

Element type: ***Characteristic overview*** **(selection button)**

Financial statement item as a **characteristic in the** ***Selected characteristics*** **list. Choose the Hierarchy icon below "Change hierarchy node entry" and then enter the**

FS item 1000000

Texts for the element definition:

Short: ***FSTotal***; **Medium:** ***FS Total***; **Long:** ***Financial Statement total***

6. Separator

Edit → Rows → Insert dividing line

Enter the character - - as an **underscore** for the separator.

In the following dialog box containing the query: *Should the underscore appear only in the value columns?*, choose *No*

Formula for the *% financial statement total* row (Y001 %A Y002):

Edit → Element → Insert element **(or double-click this row)**

Continued on next page

Element type: Formula (selection button)

Formula: ***Y001 %A Y002***

Texts: short: % *Portion*; Medium *% financial statement total*; Long: *% portion financial statement*.

This row should be ***displayed*** in a different color to the other rows.

Formatting → Color setting: Color for totals

Check your form.

Save your form.

a) **Procedure:**

Create form:

Once you have completed the form, it should look as follows:

Assets	**Fiscal year 2009**	**Fiscal year 2008**	**Fiscal year 1999**
Fixed assets	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx
Financial statements total	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx
% financial statement total	xx.xx	xx.xx	xx.xx

Example: The current fiscal year in the above report is 2001.

User menu → AC280 Drilldown Activities →Drilldown Reporting: Maintain Forms → Create Form

Create a form *G##-BILKENN1* (## = your group number) for the *Reporting for table FAGLFLEXT* form type.

Enter ***G## Asset proportion*** **as the description**.

Choose the **structure** ***Two axes (matrix)***.

Choose ***Create***

Edit → General data selection → General data selection

The general selections should contain the characteristic **Financial statement version** with the value ***INT***, the characteristic Record type ***0*** **(actual)** and **Ledger** ***0L***.

Continued on next page

Click **Financial statement version**, **Record type *0* (actual)** and **Ledger *0L***. Then click the arrow pointing left to add these characteristics to the ***Selected characteristics* list**. For the **financial statement version**, enter **INT as the *From* value**, **0** for the **Record type** and **0L** for the **Ledger**.

Choose *Confirm*.

You want to determine the values for the characteristic **Fiscal year** and the **texts** in which the fiscal years are displayed using **local variables**.

In the form, define the **characteristic variable *FY*** and the **text variable *FY***.

Choose ***Financial statement value*** as the key figure.

The values in all columns should have **2 decimal places**.

Columns

Column 1:

Create the first column (column 1):

Place the cursor on **Column 1**,

Edit → Element → Change

Element type: *Key figures with characteristics*

Enter

Key figure: *BILWERT (Balance sheet value)*

Characteristic: Choose *Fiscal year* from the **list of available characteristics (you may need to scroll in the list).**

Arrow: *Selected to left*

Select from

Local variable: **FY**

Enter

Change short, medium, and long texts button

Text:

for column 1: Short: *FY1 $FY* Medium: *FsclYear* $FY Long: *Fiscal year*; $FY

Enter

Confirm

The **width** of this **column** should be **19**:

Continued on next page

Place the cursor on the column and choose:

Formatting → Column → Column width

To copy the **formatting**, and the **content** of the **first column to the second column**, place the **cursor** on the **first column** and click . Place the **cursor** on the **second column** and click .

Copy the **formatting**, and the **content** of the **first column to the third column** the same way.

You now have to change the **second column**:

Double-click the **second column**.

Edit → Element → Change

Place the cursor on the **From value *FY***.

Local variable *FY* with *Operator* hyphen (–) and *Offset 1*

Enter

Change short, medium, and long texts button

Text for column 2: Short **FY2 $FY** Medium **FiscYr $FY** Long **Fiscal year ; $FY**

Enter

Confirm

You now have to change your **third column**:

Double-click the **third column**.

Edit → Element → Change

Place the cursor on the **From value *FY***.

Local variable *FY* with *Operator* – and *Offset 2*

Enter

Change short, medium, and long texts button

Text for column 3: Short **FY3 $FY** Medium **FiscYr $FY** Long **Fiscal year ; $FY**

Enter

Confirm

Change *Text type (text lengths)* for all columns:

Formatting → All columns → Text lengths

Enter ***Two-line long text***.

Continued on next page

The values in all columns should have **2 decimal places**.

Place the cursor **on each column** and choose:

Formatting → Number format (or the ***Number format*** **button**)

Choose the **format 0.00 for decimal places**.

You now have to define **FY** as a **characteristic variable** and as a **text variable**:

Extras → Variables → Variable definition

Description of your variable for the characteristic value: *Fiscal year*

Enter *Fiscal year text* as a **description** for your **text variable**

Double-click your ***text variable*** **FY** and enter the following:

Replace selected field: ***Automatically***

Selected characteristic: ***FYEAR***

Replace selected field with: ***From field***

Replace selected characteristic value/text with: ***Characteristic value***

Selected field: ***Offset 1, length 4***

Enter

Enter

Increase the key column width:

Place the cursor on the key column: ***Formatting → Column → Column width*****;** ***30*** **as column width**

Rows

1. Configure **long text** for all rows:

   Formatting → All rows → Text lengths: One-line long text

   Choose *One-line long text* as the text type.

2. Enter the text *Assets* as the first row.

   Place the cursor on the first row

   Edit → Rows → Insert row; then Edit → Rows → Insert text

   Edit → Element → Change text: Assets

   Copy short text **button**

   Enter

3. Separator

Continued on next page

Place the cursor on the row beneath the empty row with the text **Assets**.

Edit → Rows → Insert dividing line

Enter the character **- -** as an **underscore** for the separator.

Enter

In the following dialog box with the query: **Should the separator appear only in the value columns?** Choose **No**.

Enter

4. **Financial statement items 1010000, 1020000, and 1030000**, which are to be inserted individually as rows. The total for all three will then be created in a formula and then the three individual rows hidden. :

   Place the cursor on the row beneath the separator.

   Edit → Element → Insert element (or double-click this row).

   Element type: Characteristic overview (selection button).

   FS Item as a characteristic in the Selected characteristics list.

   Enter the FS Items **1010000**, **1020000** and **1030000** each individually one after the other as rows and keep the texts for them as offered. To be able to enter these Items you have to, each time, choose the Hierarchy icon below *Change hierarchy node entry*' and then enter the FS Item number or use the matchcode button to navigate down and choose the Item number that way.

   Finally, choose Confirm to bring the Item with its description into the formula row.

   After these three rows, insert a Formula row with the addition of these three rows.

   Texts for the Formula row:

   Short: Assets; **Medium:** Fixed assets; **Long:** Fixed assets.

   You should then HIDE the 3 rows containing the FS Items **1010000**, **1020000** and **1030000**.

   To do this place the cursor on each of these rows and then choose *Edit → Rows → Hide*.

   Enter

   Confirm

Continued on next page

5. Financial statement item 1000000 *ASSETS* for the row *Financial statement total*: Place the cursor on the row beneath *Fixed assets*.

   Edit → Element → Insert element (or double-click this row)

   Element type: *Characteristic overview* (selection button).

   Click **FS item** in the ***Available characteristics* list** and then click the arrow pointing left to add this **characteristic to the *Selected characteristics* list**.

   Choose the Hierarchy icon below **Change hierarchy node entry** and then enter the value **1000000**.

   Enter the **texts** for the element definition:

   Change short, medium, and long texts button Enter the text:

   Short: *FSTotal*; Medium: *FS Total*; Long: *Financial Statement total*

   Enter

   Confirm

6. Separator:

   Place the cursor on the row **beneath the row containing the text Financial statement total**.

   Edit → Rows → Insert dividing line

   Enter the character - - as an **underscore** for the separator.

   Enter

   In the following dialog box containing the **query: *Should the underscore appear only in the value columns?***, choose ***No***

   Enter

7. Formula for the *% financial statement total row* (Y001 %A Y002):

   Place the cursor on the row beneath the separator.

   Edit → Element → Insert element (or double-click this row)

   Element type: Formula (selection button)

   Formula: *Y001 %A Y002*

   Enter

   Texts: short: % portion; Medium % financial statement total; Long: % portion financial statement.

   Enter

Continued on next page

This row should be ***displayed*** in a different color to the other rows.

Place the cursor on the row.

Formatting → Color setting: Color for totals

Check your form.

Save your form.

Task 7:

1. **Create report for key figures:**

   For this form, create the report *G##-BILKENN1* (## = group number) for report type *Reporting for Table FAGLFLEXT* with the description *G## Asset proportion*.

   ***Environment → Report → Create* (or *Report* button)**

   Choose *Company code* and *Profit center* as **drilldown characteristics**.

   On the **Output type** tab page, choose *Classic drilldown reporting* (*Basic list: Detail*) and *Available on selection screen*.

   Save your report.

   a) **Procedure:**

      Report *G##-BILKENN1* for key figures:

      For this form, create the **report *G##-BILKENN1*** (## = group number) for **Reporting for Table FAGLFLEXT** with the **description *G## Asset proportion***.

      Environment → Report → Create (or *Report* pushbutton)

      Report type *Reporting for Table FAGLFLEXT* with the **description *G## Asset proportion***

      ***Create* button**

      Choose *Company code* and *Profit center* as **drilldown characteristics**. On the *Output type* tab page, choose *Classic drilldown reporting* (*Basic list: Detail*) and *Available on selection screen*.

      Save your report.

Task 8:

1. **Execute the report:**

Continued on next page

Exit the maintenance screen for the report.

Exit the maintenance screen for the form.

Start the report from your user menu.

Choose ***Drilldown: Maintain and execute reports → Execute reports***.

G##-BILKENN1 drilldown report → Execute

(or double-click report G##-BILKENN1).

On the selection screen enter:

Currency type: 10

You can keep the **current** Fiscal Year which is offered. to you.

Execute

Drill the report down by profit center values.

a) Refer to the task description.

Task 9:

1. Create a form *G##-BILKENN2* (## = your group number) for the *Reporting for Table FAGLFLEXT* form type.

   User menu → Drilldown reporting: Maintain forms → Create form

   Use form *G##-BILKENN1* as a **template**. Enter *G## Change: F.Assets* as the description.

   The form should be structured as follows:

Assets	**Fiscal year 2009**	**Fiscal year 2008**	**Fiscal year 2007**	**Fiscal year 2006**
Fixed assets	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx

Continued on next page

Assets	Fiscal year 2009	Fiscal year 2008	Fiscal year 2007	Fiscal year 2006
Financial statements total	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	
% financial statement total <Empty row> <Empty row>	xx.xx	xx.xx	xx.xx	
Change to fixed assets	xx.xx	xx.xx	xx.xx	

Example: The **current** fiscal year in the above report is **2009**.

Note:

New column:

Add the fourth column for the fiscal year - 3. The value and the text of the fiscal year for the fourth column are to be derived in the same way as the other columns in the previous form.

To copy this formatting and the content of the third column for this fourth column, place the cursor on the third column and click on the icon *Select*

Place the cursor on the fourth column and click.

You now have to change your fourth column:

Local variable **FY** with **Operator** – and **Offset 3**

Text for column 2: Short: **FY4 $FY**

Medium: **FsclYear $FY**

Long: **Fiscal year; $FY**

The fourth column (fiscal year - 3) should now **only** show the **fixed assets**.

Deactivate the corresponding cells:

(Row: Financial statement total <> Column: FY4 $FY) Define the cell type as *Inactive*.

(Row: % financial statement total <> Column: FY4 $FY) Define the cell type as *Inactive*.

New rows:

Continued on next page

After the *% financial statements total* row, you want to display **two empty rows** and then a **separator**.

The next row should show the **change to fixed assets**, but **only** for the current year, the previous year, and the year before last.

Procedure

To enable you to recognize the corresponding columns in your cell names, you have to change the text type for all columns:

Formatting → All columns → Text lengths Text type: Short text

Select the corresponding cells: Fixed assets for FY1 $FY,

Fixed assets for FY2 $FY,

Fixed assets for FY3 $FY,

Fixed assets for FY4 $FY,

Place the cursor three rows beneath the entry *% financial statement total*, and add a separator.

Edit → Rows → Insert dividing line

Enter - - as the character for the **separator**. The separator should appear **across the entire form**.

In the **row after the separator**, choose *Formula* and enter your formula component, for example **Y001**.

Enter the texts: Short: *Change*. Medium *Change*. Long *Change fixed assets*.

To determine the **Change to fixed assets**, you have to enter the **formulas**:

	FY1 $FY	**FY2 $FY**	**FY3 $FY**
Change to fixed assets	**Assets /FY1 $FY– Assets /FY2 $FY**	**Assets /FY2 $FY – Assets /FY3 $FY**	**Assets /FY3 $FY– Assets /FY4 $FY**
Text: Short, medium, long	Change FY1	Change FY2	Change FY3

First select the cells in the *Fixed assets* row. These are the cells:

Fixed assets row, Column FY1 $FY;

Edit → Element → Change: Selected

Fixed assets row, Column FY2 $FY;

Continued on next page

Edit → Element → Change: Selected

Fixed assets row, Column FY3 $FY;

Edit → Element → Change: Selected

Fixed assets row, Column FY4 $FY;

Edit → Element → Change: Selected

The change to fixed assets should **only** be for the current year, the previous year, and the year before last. Edit the corresponding cells by entering the **formula for calculating fixed assets**. Choose *Change FYX* (X = year 1, 2, 3) as texts.

In the cell for the row *Change to fixed assets* and the column *FY4 $FY*, choose *Inactive* as the **cell type**.

To have two-line headings for your columns, you have to change the text type for all columns:

Formatting → All columns → Text lengths

Enter *Two-line long text*.

Check your form.

Save your form.

a) **Procedure:**

Create a **form *G##-BILKENN2*** (## = your group number) for the **form type *Reporting for Table FAGLFLEXT***, with the **description *G## Change AV***:

User menu → AC280 Drilldown Activities →Drilldown Reporting: Maintain Forms → Create Form

Use form *G##-BILKENN1* as a **template**.

Copy from **form: *G##-BILKENN1. Create* pushbutton**.

The form should be structured as follows:

Assets	**Fiscal year 2009**	**Fiscal year 2008**	**Fiscal year 2007**	**Fiscal year 2006**
Fixed assets	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx

Continued on next page

Assets	Fiscal year 2009	Fiscal year 2008	Fiscal year 2007	Fiscal year 2006
Financial statements total	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	
% financial statement total<Empty row> <Empty row>	xx.xx	xx.xx	xx.xx	
Change to fixed assets	xx.xx	xx.xx	xx.xx	

Example: The current fiscal year in the above report is 2009.

Procedure: Column

To copy this formatting and the content of the first column to the fourth column, place the cursor on the fourth column and choose .

Double-click the **fourth column**.

Edit → Element → Change

Place the cursor on the **From value *FY***.

Local variable *FY* with ***Operator*** - and ***Offset 3***

Enter

Change short, medium, and long texts button

Text for column 2: Short **FY4 $FY** Medium **FsclYear $FY** Long **Fiscal year; $FY**

Enter

Confirm

The **fourth column** should now **only** show the **fixed assets** value.

Double-click the corresponding cells:

Cell in the **row: Financial statements total**; in the **last column** (FY4 $FY).

Define the **cell type** as ***Inactive***.

Continued on next page

Cell in the row: **% financial statement total**, in the **last column** (FY4 $FY).

Define the **cell type** as ***Inactive***.

Procedure: Rows

After the *% financial statements total* row, you want to display **two empty rows** and then a **separator**.

The next row should show the **change to fixed assets**, but **only** for the current year, the previous year, and the year before last.

To enable you to recognize the corresponding columns in your cell names, you should change the text type for all columns:

Formatting → All columns → Text lengths

Enter the text type *Short text*.

Place the cursor three rows beneath the entry *% financial statement total*, and add a separator.

Edit → Rows → Insert dividing line

Separator characters: – –.

Should the underscore appear only in the value columns? NO

Place the cursor on the row beneath the separator.

Edit → Element → Insert element (or double-click this row)

Element type: ***Formula***; formula component (for example, **Y001**).

Texts: **Short:** ***Change.*** **Medium:** ***FA change*****; Long:** ***Change to fixed assets***

To determine the change to fixed assets, you have to enter the formula:

	FY1 $FY	**FY2 $FY**	**FY3 $FY**
Change to fixed assets	**Assets /FY1 $FY– Assets /FY2 $FY**	**Assets /FY2 $FY – Assets /FY3 $FY**	**Assets /FY3 $FY– Assets /FY4 $FY**
Text: Short, medium, long	Change FYX	Change FYX	Change FYX

First, select the cells in the *Fixed assets* row. These are the cells:

Fixed assets row, Column FY1 SFY;

Continued on next page

Edit → Element → Change: Selected

Fixed assets row, Column FY2 $FY;

Edit → Element → Change: Selected

Fixed assets row, Column FY3 $FY;

Edit → Element → Change: Selected

Fixed assets row, Column FY4 $FY;

Edit → Element → Change: Selected

The change to fixed assets should **only** be for the **current year**, the **previous year**, and the **year before last**.

Edit the corresponding cells by entering the **formula for calculating fixed assets**.

Place cursor on cell: Change to fixed assets row, Column FY1 $FY;

Edit → Element → Change: Select Formula

Formula components (meaning): Assets /FY1 $FY – Assets /FY2 $FY

Text: Short: Change FY1, *Copy short text* button

Enter

Place cursor on cell: Change to fixed assets row, Column FY2 $FY;

Edit → Element → Change: Select Formula

Formula components (meaning): Assets /FY2 $FY – Assets /FY3 $FY

Text: Short: Change FY2, *Copy short text* button

Enter

Place cursor on cell: Change to fixed assets row, Column FY3 $FY;

Choose *Edit → Element → Change: Formula*

Formula components (meaning): Assets /FY3 $FY – Assets /FY4 $FY

Text: Short: Change FY3, *Copy short text* pushbutton

Enter

Place cursor on cell: Change to fixed assets row, Column FY4 $FY;

Edit → Element → Change: Inactive

Enter

Continued on next page

To have **two-line headings** for your **columns**, you have to change the ***text type*** **for all columns**:

Formatting → All columns → Text lengths

Enter *Two-line long text*.

Check your form.

Save your form.

Task 10:

1. For this form, create the **report G##-BILKENN2** (## = group number) for **the *Reporting for table FAGLFLEXT form type*** with the description *G## Change: fixed assets*.

   On the maintenance screen for the form, choose:

   Environment → Report → Create (or *Report* pushbutton)

   Choose **Company code and Profit center** as **drilldown characteristics**. On the *Output type* tab page, choose *Classic drilldown (Basic list: Detail)* and *Available on selection screen*.

   Save your report.

   a) **Report G##-BILKENN2 for key figures:**

      For this form, create the **report *G##-BILKENN2*** (## = group number) for **report type *Reporting for Table FAGLFLEXT*** with the **description *G## Change: fixed assets***.

      Environment → Report → Create (or *Report* pushbutton)

      Report type *Reporting for Table FAGLFLEXT* with the **description *G## Change: fixed assets***

      ***Create* button**

      Choose *Company code* and *Profit center* as **drilldown characteristics**.

      On the *Output type* tab page, choose *Classic drilldown reporting* (*Basic list: Detail*) and *Available on selection screen*.

      Save your report.

Task 11:

1. Execute your report. Exit the maintenance screen for the report by choosing *Exit*. Start the report from your user menu.

Continued on next page

Choose ***Drilldown: Maintain and execute reports → Execute reports***.Choose report *G##-BILKENN2*. You want to display the financial statement values for the **currency type 10** and company code *1000* for the current fiscal year

a) Execute the report:

Exit the maintenance screen for the report.

Exit the maintenance screen for the form. Start the report from your user menu.

Choose ***Drilldown: Maintain and execute reports → Execute reports***.

G##-BILKENN2

Enter the **Currency type 10** and Company code **1000** and **Current** *fiscal year* on the selection screen.

And select Classic drilldown report in the report type

Execute

Lesson Summary

You should now be able to:

- Define forms
- Define and execute reports
- Define forms and reports more flexibly using characteristic and text variables

Lesson: Displaying Reports

Lesson Overview

In this lesson, you will learn about output types and the functions provided in drilldown reports.

Lesson Objectives

After completing this lesson, you will be able to:

- Use different types of report outputs
- Create graphics
- Export data to Microsoft Excel
- Have the system perform currency translation

Business Example

Employees in Financial Accounting want to use various types of report output. They also want to learn about additional functions within drilldown reporting.

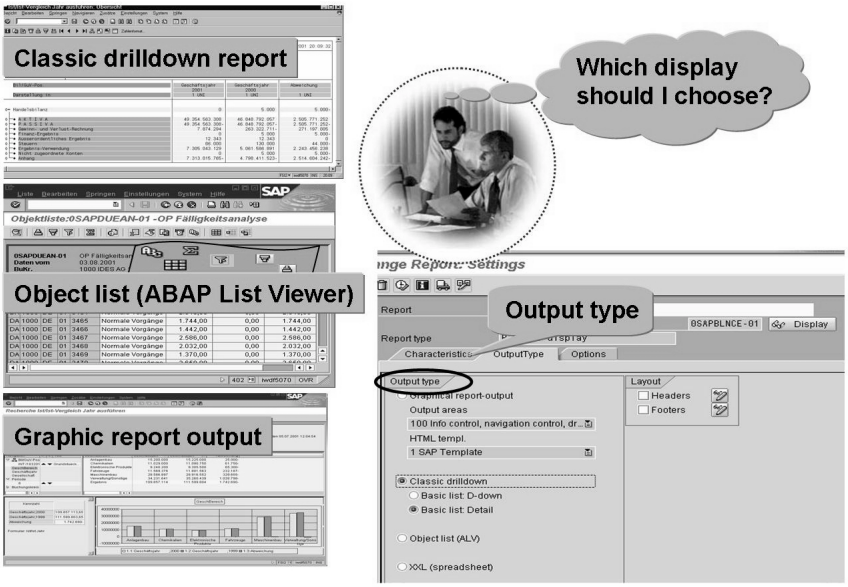

Figure 88: Different Output Types for Reports

The output type that you choose in the report definition is only a default setting. When you run the report, the output type that you define is already selected. However, you can choose an alternative output type, **graphic report output**, when you run the report.

You use the graphic report output if you want to display the report data attractively on the screen, or if you need several views of the report data simultaneously (for example, drilldown list and detail list). For the **graphic report output**, you can define the required output areas and determine which HTML template is to be used for the report header (information area). For example, you can include your company logo in the report. The header and footer will also appear if you have defined them and prepared the HTML template accordingly.

Classic drilldown report: For **classic drilldown reports**, you can define which list type (drilldown/detail) is to be used as the basic list and whether headers and footers are to be printed. For special purposes, you can define that the **object lists** are output using the SAP List Viewer. This gives you the option of creating reports that have several characteristic values in the leading column. You can also use the additional options provided by the SAP List Viewer, such as flexible filter and sort options, definition of display variants, and so on. Report output to **XXL**. The system continues processing the report data using a spreadsheet.

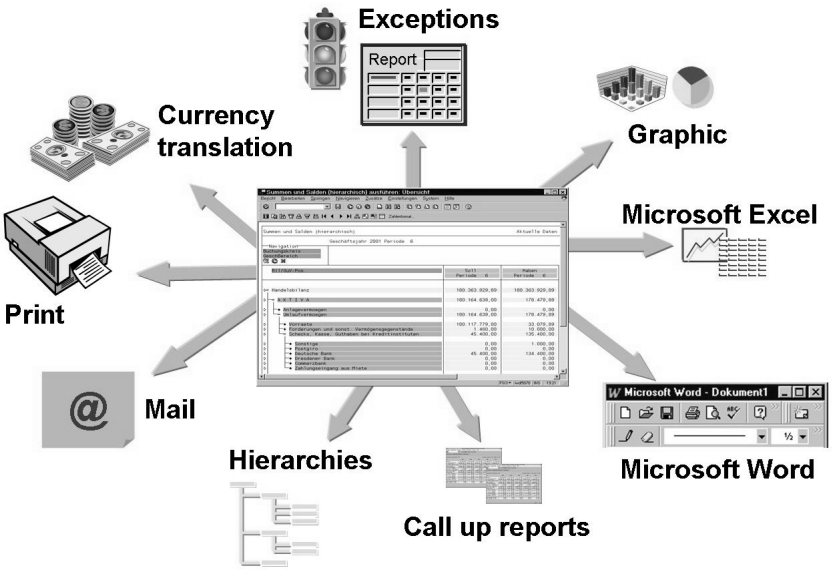

Figure 89: Function Levels for Different Users

Drilldown reporting functions are composed of three groups:

Level 1 contains the basic drilldown reporting functions. You can navigate within the characteristic hierarchy of a predefined report using these functions. You can use the functions of the detail list to carry out a specific analysis of larger volumes of data. Certain functions are not available at this function level (for example, functions for maintaining reports, for changing settings in the report list, or for connections to additional products such as the Microsoft Excel list viewer). This level is intended for users who occasionally want to use certain form reports in drilldown reporting for further analyses, without requiring all the navigation functions.

Level 2 covers the complete functions of drilldown reporting (all navigation functions), and provides a connection to the Excel list viewer, PC download, graphic functions, functions for changing the display, and all functions within hierarchies. You can display exceptions. Certain functions are not available at this function level (for example, functions for maintaining reports and functions for setting up a customized print layout). This level is intended for users who require all the analysis functions in drilldown reporting and the connections stated above. **All functions** also covers print preparation, saving reports, defining exceptions, and report maintenance direct from drilldown reporting, thus all the functions provided by drilldown reporting. This level is designed for users who maintain reports or set up print preparation in addition to the functions for level 2. You can change the level by choosing *Extras → Additional functions*.

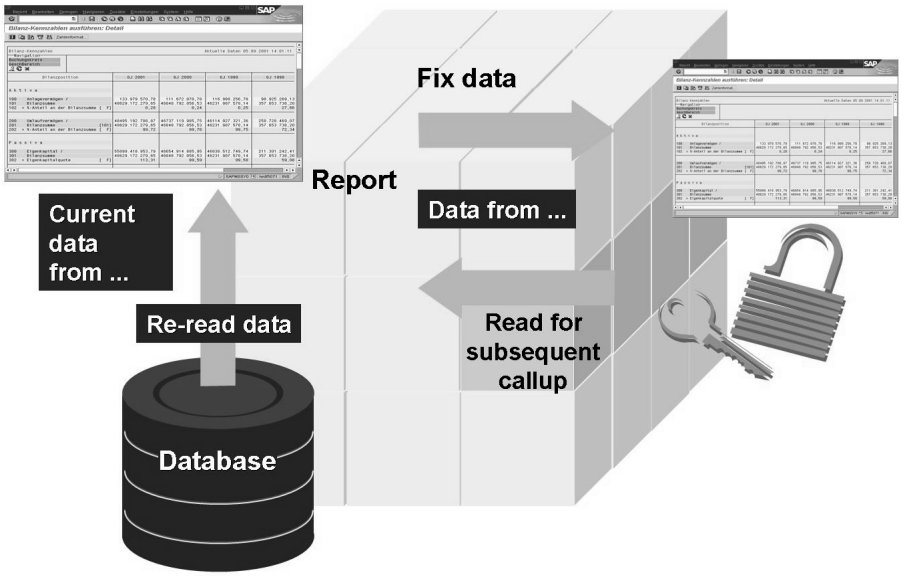

Figure 90: Frozen Data

You can freeze data for each report and variable combination. This enables you to fulfil business requests for defined statuses of a report.

You can create **frozen data** for a report online or in the background.

When using this method, you do not have to wait for the transaction data records to be read and you automatically receive the last data saved.

The database server is not greatly affected. SAP therefore recommends that you work with frozen data for complex reports involving large volumes of data.

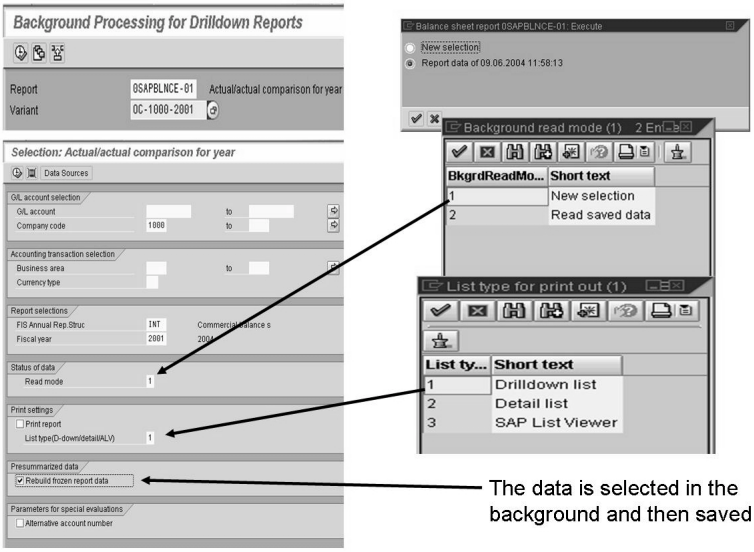

Figure 91: Background Processing

You can save report data at specified times in the background (transaction FS(K/D)IB). By saving report data, you do not have to select more data from the database when you run a report. The data is already available in a format that reduces the report runtime dramatically.

Using selection variants, you can save the variable entries and additional settings as variants for a report.

You can choose the following list types: drilldown list, detail list, and SAP List Viewer.

Exercise 9: Drilldown Reporting in Financial Accounting

Exercise Objectives

After completing this exercise, you will be able to:

- Define and execute different types of forms and reports in FI-GL
- Explain and use navigation options when you are displaying a report
- Define forms and reports more flexibly using characteristic and text variables
- Try various layout settings for the report output
- Explain the different types of cells and use cells in formulas
- Use different output types for reports and test the functions during output

Business Example

Employees in Financial Accounting want to learn about the evaluation options provided by drilldown reporting, and use the various navigation options.

Task 1:

For the existing form **0SAPFS10-01**, create the report **G##-BALANC1** (## = group number) with the description **GR##-balance display** for the report type Reporting for Table FAGLFLEXT.

1. ***Drilldown Reporting: Maintain and execute reports → Create report***

   Choose the following drilldown characteristics in addition to the **fixed characteristics Currency (1) and currency type (2)**:

   Financial statement item (3)

   Account number (4), and

   Profit Center (5).

   The numbers in parentheses ( ) correspond with the **sort order**.

   In the **hierarchy selection** for the **financial statement item**, you determine that you have to **enter the financial statement version when you execute the report**.

   As the **output type**, choose ***Classic drilldown (basic list: detail) and Available on selection screen.***.

   Save your report.

Continued on next page

Task 2:

Execute the report.

1. Exit the maintenance screen for the report by choosing *Exit*.

   Execute your report.

   Start the report from your user menu.

   Drilldown Reporting: Maintain and execute reports →Execute reports

   Drilldown report → Execute (or double-click report G##-BALANC1.)

   Choose the **current fiscal year**.

   You want to output the financial statement values for company code **1000**.

   Currency type **10**

   Choose financial statement version **INT**.

   Period is **1**.

   Ledger is **0L** with Current fiscal year

Task 3:

In the navigation area, change your fixed characteristics to **currency type** and **currency EUR**.

1. In the output, drill down your report according to the **characteristic values for account number** and **Profit center** to see the **period balance** for the **current fiscal year** for Consumptn, raw mat.1 (account 400000) and the **Profit center 1010** (High speed pumps).

   Reset the **selection** of the characteristics **Account number** and **Profit center**.

   Execute the following functions:

   a) **Number format for amount columns**, scaling 100000

   Settings → Number format: Amount columns(or: pushbutton Number Format)

   b) **Hierarchy display** (+ Expand/Collapse) for the **financial statement item in the navigation area on the left, choose *Financial statement item*.**

   Navigate → FS item

   Navigate → Hierarchy → Expand All.

   Navigate → Hierarchy → Collapse, and then once again choose:

   Navigate → Hierarchy → Collapse.

   c) **Currency translation:**

Continued on next page

Settings → Currency: **USD with mean rate (as of start of period)**

d) **Characteristic Display:**

Settings → Characteristic Display**: Name and key**

Task 4:

Execute your report , **G##-BALPL-02** (## = group number).

1. ***Drilldown Reporting: Maintain and execute reports →Execute reports***

   Drilldown report → Execute (or double-click report G##-BALPL-02).

   Current fiscal year

   Company code: 1000

   Report → Save data

   Run the report again with the same selection data.

Task 5:

Execute your report in the background.

1. ***Drilldown Reporting: Maintain and execute reports →Background processing***

   Define *Reporting for Table FAGLFLEXT* as the report type.

   Report **G##-BALPL-02**

   Execute

   Enter the **Currency type 10**.

   Enter **Company Code 1000** and the previous fiscal year.

   Choose **1** (reselect) as the **Read mode**, and

   Rebuild frozen report data as presummarized data.

   Execute the program in the background.

   Program → Execute in background

   Choose the output device **LP01** (do not print immediately) and then choose *Immediate* as the **start**.

   Choose *Save*.

   Check whether your background job is complete.

Continued on next page

Now perform your **report online** again, entering the **same selection data** as you entered for background processing **(fiscal year: *previous year*** and **company code *1000)***.

Which report data does the system propose?

Solution 9: Drilldown Reporting in Financial Accounting

Task 1:

For the existing form **0SAPFS10-01**, create the report **G##-BALANC1** (## = group number) with the description **GR##-balance display** for the report type Reporting for Table FAGLFLEXT.

1. ***Drilldown Reporting: Maintain and execute reports → Create report***

   Choose the following drilldown characteristics in addition to the **fixed characteristics Currency (1) and currency type (2)**:

   Financial statement item (3)

   Account number (4), and

   Profit Center (5).

   The numbers in parentheses ( ) correspond with the **sort order**.

   In the **hierarchy selection** for the **financial statement item**, you determine that you have to **enter the financial statement version when you execute the report**.

   As the **output type**, choose ***Classic drilldown (basic list: detail) and Available on selection screen..***

   Save your report.

   a) As drilldown characteristics, choose the following:

      In addition to the **fixed characteristics**:

      - **(1) Currency** and
      - **(2) Currency type,**

      choose the user-defined characteristics:

      - **(3) FS item,**
      - **(4) Account number,** and
      - **(5) Profit center**.

      On the *Output type* tab page, choose the **output type *Classic drilldown (basic list: Detail)*** and ***Available on selection screen.***

      Save your report.

Continued on next page

Task 2:

Execute the report.

1. Exit the maintenance screen for the report by choosing *Exit*.

   Execute your report.

   Start the report from your user menu.

   Drilldown Reporting: Maintain and execute reports →Execute reports

   Drilldown report → Execute (or double-click report G##-BALANC1.)

   Choose the **current fiscal year**.

   You want to output the financial statement values for company code **1000**.

   Currency type **10**

   Choose financial statement version **INT**.

   Period is **1**.

   Ledger is **0L** with Current fiscal year

   a) **Company code *1000*** and **Financial statement version *INT***

      Execute

Task 3:

In the navigation area, change your fixed characteristics to **currency type** and **currency EUR**.

1. In the output, drill down your report according to the **characteristic values for account number** and **Profit center** to see the **period balance** for the **current fiscal year** for Consumptn, raw mat.1 (account 400000) and the **Profit center 1010** (High speed pumps).

   Reset the **selection** of the characteristics **Account number** and **Profit center**.

   Execute the following functions:

   a) **Number format for amount columns**, scaling 100000

   Settings → Number format: Amount columns(or: pushbutton Number Format)

   b) **Hierarchy display** (+ Expand/Collapse) for the **financial statement item in the navigation area on the left, choose *Financial statement item*.**

   Navigate → FS item

   Navigate → Hierarchy → Expand All.

   Navigate → Hierarchy → Collapse, and then once again choose:

Continued on next page

Navigate → Hierarchy → Collapse.

c) **Currency translation:**

Settings → Currency: **USD with mean rate (as of start of period)**

d) **Characteristic Display:**

Settings → Characteristic Display**: Name and key**

a) **Procedure:**

In the right-hand **Navigation area: currency type: arrow downwards** or using the **magnifying glass, choose *10*** (company code currency)

In the **navigation area** on the left:

Choose **Account number**

In the **navigation area** on the right:

Choose the **magnifying glass** next to the account number.

In the **value list**, search for **400000** using the binoculars (choose *Execute* to select the value)

In the **navigation area** on the left: Choose **Profit center**

In the **navigation area** on the right:

Click the magnifying glass next to Profit center

Profit center 1010 (High speed pumps)

Reverse:

In the **navigation area** on the right:

Choose the **totals icon** in front of Profit center, and

on the **totals icon** in front of Account number

Execute the following functions:

a) **Number format for amount columns**, scaling 100000

Settings → Number format: Amount columns(or: pushbutton Number Format)

b) **Hierarchy Display:**

Navigate → FS item

Navigate → Hierarchy → Expand all

Navigate → Hierarchy → Collapse and again

Navigate → Hierarchy → Collapse

Continued on next page

c) **Currency translation**

Settings → Currency:

By currency: ***USD***

Translation type: ***Mean rate (as of start of period)***.

d) **Characteristic Display:** All characteristics with **name and key**.

Settings → Characteristic Display

Task 4:

Execute your report , **G##-BALPL-02** (## = group number).

1. ***Drilldown Reporting: Maintain and execute reports →Execute reports***

   Drilldown report → Execute (or double-click report G##-BALPL-02).

   Current fiscal year

   Company code: 1000

   Report → Save data

   Run the report again with the same selection data.

   a) Choose the ***current*** **fiscal year**.

      You want to display the financial statement values for **company code** ***1000***. When the data is displayed, choose ***Save***.

      Report → Save data

      If you run the report again with the same selection data, you have the option of **reselecting the data** or choosing the **report data for the last extract saved**. Execute the **report with your saved data**.

Task 5:

Execute your report in the background.

1. ***Drilldown Reporting: Maintain and execute reports →Background processing***

   Define *Reporting for Table FAGLFLEXT* as the report type.

   Report **G##-BALPL-02**

   Execute

   Enter the **Currency type 10**.

   Enter **Company Code 1000** and the previous fiscal year.

Continued on next page

Choose **1** (reselect) as the **Read mode**, and

Rebuild frozen report data as presummarized data.

Execute the program in the background.

Program → Execute in background

Choose the output device **LP01** (do not print immediately) and then choose *Immediate* as the **start**.

Choose *Save*.

Check whether your background job is complete.

Now perform your **report online** again, entering the **same selection data** as you entered for background processing **(fiscal year: *previous year*** and **company code *1000)***.

Which report data does the system propose?

a) **PREVIOUS fiscal year**

Company code *1000*

Read mode: *1* (reselect)

Presummarized data: Choose *Rebuild frozen report data*.

Program → Execute in background

Output device: `LP01`

Continue

Values for Start Time: `Immediately`

Save

The following message appears:

"Job scheduling performed for program. You can check whether your background job is complete by choosing:"

System → Own jobs

Report ***G##-BALPL-02***

Drilldown report → Execute

Enter the **same selection data** as for background processing **(Fiscal year: PREVIOUS YEAR and company code *1000*)**.

The system **provides** the **report data** that was saved by background processing.

Lesson Summary

You should now be able to:

- Use different types of report outputs
- Create graphics
- Export data to Microsoft Excel
- Have the system perform currency translation

Lesson: Report/Report Interface and Report Assignment

Lesson Overview

In this lesson, you will learn about report/report interfaces and report assignments, which are provided within drilldown reports.

Lesson Objectives

After completing this lesson, you will be able to:

- Set up a report/report interface
- Use report assignments

Business Example

Employees in Financial Accounting want to use various drilldown reports. Report assignments to drilldown reports are considered of interest.

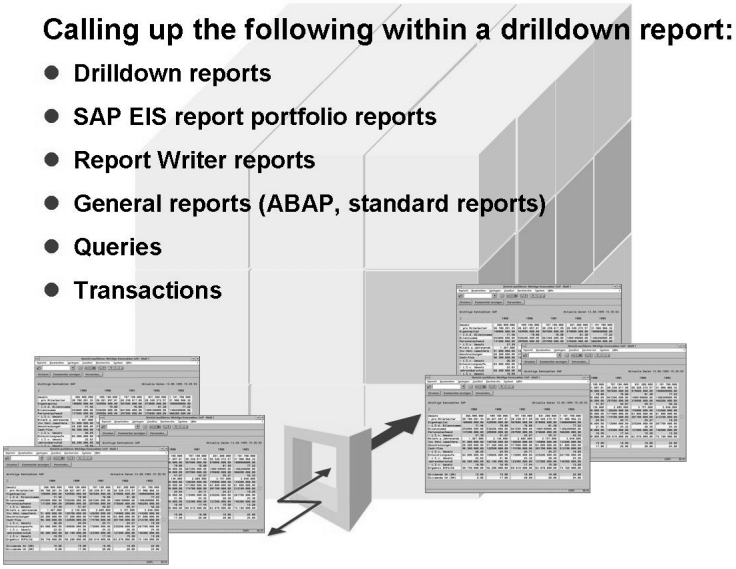

Figure 92: Report/Report Interface

To enable you to report on a number of characteristics or changing combinations of characteristics, you would have to define a very comprehensive report that might not actually be executable online due to the large volume of data.

Using the report/report interface, you can link several individual reports, each with a limited number of characteristics, to allow you to perform flexible data evaluations online.

Recipient objects are other drilldown reports, report portfolios, queries, ABAP reports, Report Writer reports, and transactions.

Using the report/report interface you can, for example:

- Link reports that contain different characteristics in an application. This enables you to report on a larger number of characteristics than with individual reports.
- Link reports created in the different application classes.

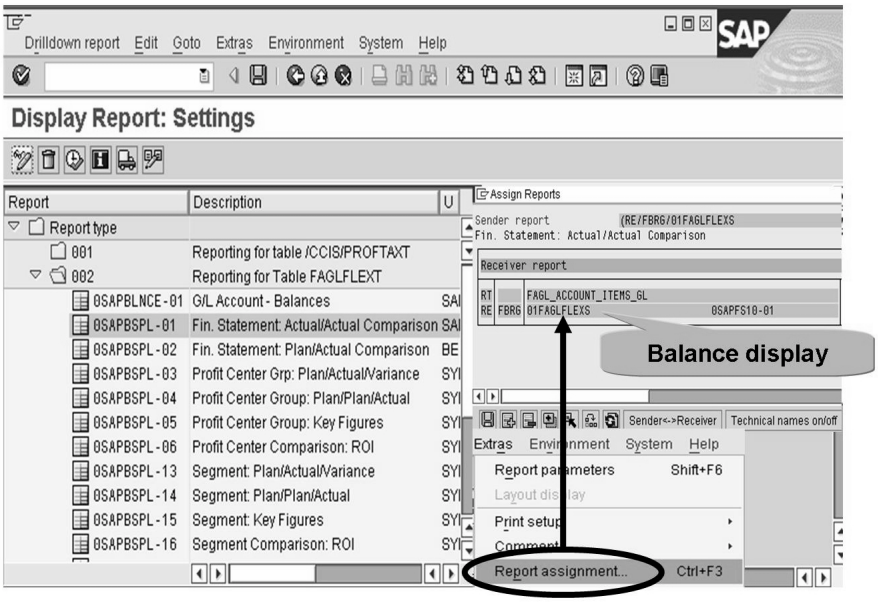

Figure 93: Report Assignment

1.

You assign the recipient reports in the report definition by choosing *Options*. Choose *Report assignment* and define the report type (report portfolio, query, drilldown report, ABAP report, Report Writer, or transaction).

Exercise 10: Drilldown Reporting in Financial Accounting

Exercise Objectives

After completing this exercise, you will be able to:

- Define and execute different types of forms and reports in FI-GL
- Explain and use navigation options when you are displaying a report
- Define forms and reports more flexibly using characteristic and text variables
- Try various layout settings for the report output
- Explain the different types of cells and use cells in formulas
- Use different output types for reports and test the functions during output

Business Example

Employees in Financial Accounting want to learn about the evaluation options provided by drilldown reporting and use the various navigation options.

Task 1:

Change report **G##-BALPL-02** (## = group number) such that you forward the data from this report to **a recipient report**.

1. Line item report FAGL_ACCOUNT_ITEMS_GL

   Choose

   the *Options* tab page.

   Choose *Extras*, then *Report assignment*.

   Choose *Insert row*.

   Choose the *Other report type* pushbutton: Report type *RT*,

   Choose *FAGL_ACCOUNT_ITEMS_GL* (no variant); description of recipient report: *Line item G/L accounts*

   Save the report assignment.

   Save the report.

Continued on next page

Task 2:

Execute report **G##-BALPL-02** (## = group number). Choose **currency type 10**, **company code 1000** and **Current fiscal year**.

1. In the output choose the Account number to breakdown on and go down until you find the account **113100 Dte Bank domestic**.

   Place the cursor on the **amount** for the **current fiscal year**.

   Choose *Call up report* .

   Call up the report for G/L account line items and go to the document display.

Solution 10: Drilldown Reporting in Financial Accounting

Task 1:

Change report **G##-BALPL-02** (## = group number) such that you forward the data from this report to **a recipient report**.

1. Line item report FAGL_ACCOUNT_ITEMS_GL

   Choose

   the *Options* tab page.

   Choose *Extras*, then *Report assignment*.

   Choose *Insert row*.

   Choose the *Other report type* pushbutton: Report type *RT*,

   Choose *FAGL_ACCOUNT_ITEMS_GL* (no variant); description of recipient report: *Line item G/L accounts*

   Save the report assignment.

   Save the report.

   a) Change report **G##-BALPL-02**.

      Choose *User menu* → *Change report*.

      Place the cursor on **G##-BALPL-02**.

      Choose *Drilldown report* → *Change*.

      FAGL_ACCOUNT_ITEMS_GL (no variant).

      Choose the Options tab page

      Choose Extras, then Report assignment.

      Choose Insert row.

      Choose the Other report type pushbutton: Report type RT,

      Enter FAGL_ACCOUNT_ITEMS_GL (no variant); description of recipient report: Line

      item G/L accounts

Continued on next page

Task 2:

Execute report **G##-BALPL-02** (## = group number). Choose **currency type 10**, **company code 1000** and **Current fiscal year**.

1. In the output choose the Account number to breakdown on and go down until you find the account **113100 Dte Bank domestic**.

   Place the cursor on the **amount** for the **current fiscal year**.

   Choose *Call up report* .

   Call up the report for G/L account line items and go to the document display.

   a) Click on the navigation element Account number, then on FS Item to allow for a breakdown by account number. Then scroll down until you find the account 113100. Click on the balance for the current year and then press the *Call up Report* icon. This will bring you to the G/L Account Line Items Display.

Lesson Summary

You should now be able to:

- Set up a report/report interface
- Use report assignments

Unit Summary

You should now be able to:

- Describe your knowledge of the architecture of drilldown reporting
- Explain the terms **characteristics** and **key figures** and the different types of each.
- Explain the difference between single-axis and dual-axis forms and use these forms appropriately
- Use various navigation options in drilldown reports
- Define forms
- Define and execute reports
- Define forms and reports more flexibly using characteristic and text variables
- Use different types of report outputs
- Create graphics
- Export data to Microsoft Excel
- Have the system perform currency translation
- Set up a report/report interface
- Use report assignments

Unit 5

Insight into BW for Financial Accounting Queries

Unit Overview

Employees in Accounts Receivable Accounting now want to find out about the evaluation options that can be used in BW for data from Financials.

Unit Objectives

After completing this unit, you will be able to:

- Explain the basics of SAP BW architecture
- Gain an overview of the InfoProviders in Financials
- Explain the basics of the InfoCube 0FIAR_C02: FIAR Transaction Data
- Create and change queries
- Explain and use the navigation options provided for query display
- Save query output in a workbook
- Define and use characteristic value and text variables
- Define conditions and exceptions and use them when you display a query
- Tailor certain properties of queries to your requirements
- Add queries to existing workbooks

Unit Contents

Lesson: SAP BW Architecture and InfoArea for Financials

Lesson Overview

In this lesson, you will learn about the basic structure of the SAP Business Information Warehouse (SAP BW) and standard queries in Financials.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the basics of SAP BW architecture
- Gain an overview of the InfoProviders in Financials

Business Example

Employees in Financial Accounting want to use the evaluation options delivered in SAP BW. They are primarily interested in finding out the basics of the SAP BW architecture.

Figure 94: SAP BW Architecture

The SAP Business Information Warehouse (SAP BW) uses a multilevel architecture to enable maximum flexibility.

SAP BW can extract and deploy data from a variety of sources. This includes R/3 and R/2 systems, external systems, flat files, commercial data providers, and other SAP BW systems.

The **SAP BW server** delivers all of the tools required for modeling, extracting, implementing, summarizing, saving, and calling up the data. Since the description of the data is stored in a shared metadata repository, irrespective of the source, data can be combined from a large number of sources and used in extended analyses. The functions delivered in the **Administrator Workbench** allow administrators to control, monitor, and maintain all processes for data procurement.

SAP BW users can access data using the SAP Business Explorer, a standard Web browser, or third-party presentation tools that are certified for use with a general BAPI interface.

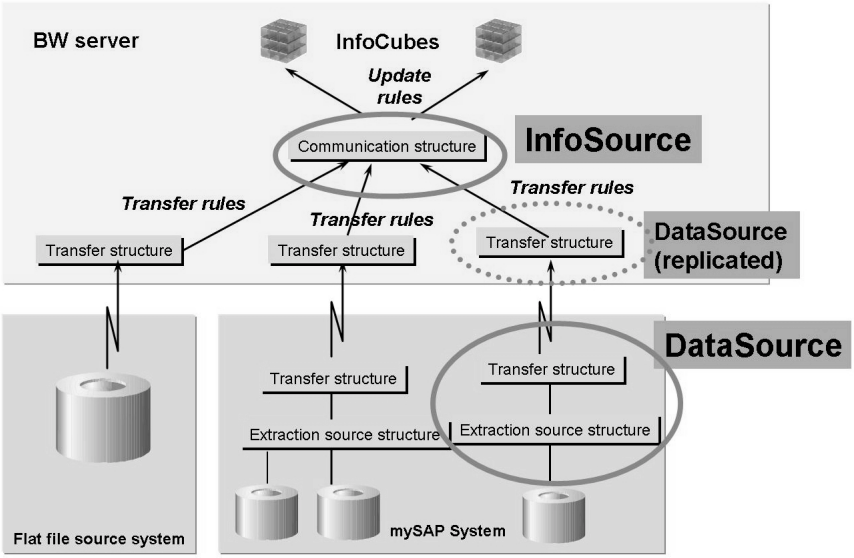

Figure 95: DataSource and InfoSource

An **InfoSource** is a quantity of information that logically belongs together, summarized into a single unit.

The InfoSource is located **in the BW system** and contains the **communication structure**.

A communication structure delivers the data that is to be sent to the InfoCube.

It contains the **InfoObjects**, which represent data that logically belongs together for the InfoSource.

The **DataSource in the OLTP system** contains the **extraction source structure** and the **transfer structure**.

The extraction programs use these structures to access and extract data from the source system.

The **DataSource** is **replicated in the SAP BW System**. This is where a **duplicate of the transfer structure** is generated

The transfer structure in the BW system is linked with the InfoSource using **transfer rules**.

These rules allow incoming data to be debugged and modified.

InfoSources can comprise **transaction data and master data** (attributes, texts, and hierarchies).

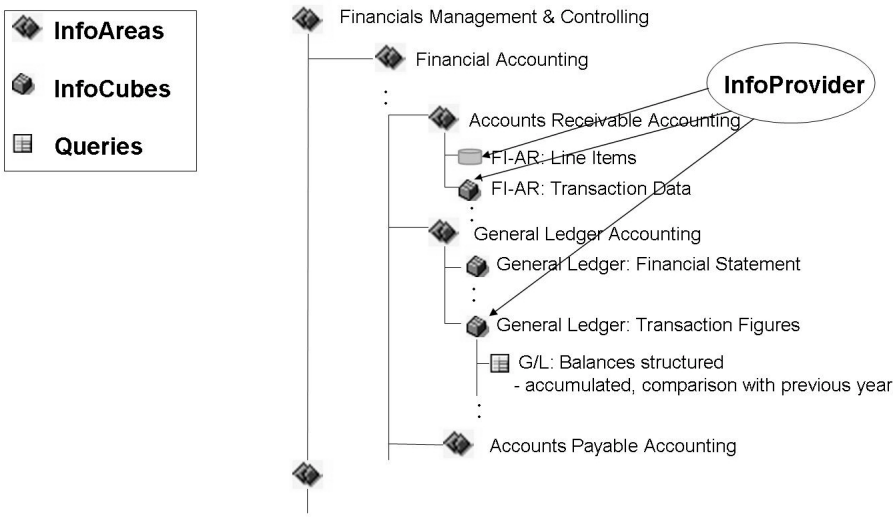

Figure 96: InfoArea Financial Accounting

The SAP BW databasis comprises data areas (InfoProviders) that are distinct from the business perspective.

You analyze the SAP BW dataset by defining queries for InfoProviders in the BEx Query Designer.

By selecting and combining InfoObjects (characteristics and key figures) or re-usable structure in a query, you determine the ways in which the data for the selected InfoProvider can be analyzed.

In the InfoArea **Financial Accounting**, there are standard InfoProviders (such as InfoCubes and ODS objects) and queries for the application areas Asset Accounting, Accounts Receivable Accounting, General Ledger Accounting, Accounts Payable Accounting, and Lease Accounting.

Exercise 11: InfoArea for Financials

Exercise Objectives

After completing this exercise, you will be able to:

- Find standard queries in the area Financials
- Execute two standard queries in General Ledger Accounting and Accounts Payable Accounting

Business Example

Employees working in Financial Accounting want to gain an overview of the standard queries in SAP BW.

Task:

1. You would like to see a structured list of the cumulated balances with a comparison of the current fiscal year against the previous year for the area General Ledger Accounting. Call up the BEx Analyzer and execute the query *G/L: Balances structured - accumulated, comp. with prev.year*.

Company code:	`1000`
Financial statement version:	`INT`
Current fiscal year:	`2003`
Posting period:	`Current period`

   Deactivate the hierarchy so that you get just the account numbers shown (key) sequentially in the list.

   The accounts should then be shown only as **key**.

2. You would like to obtain a list of account balances and a sales list for your vendors in the area Accounts Payable Accounting. Call up the BEx Analyzer and execute the query

   Vendors: Overview

Company code:	`1000`
Period/Fiscal year:	`001.2003` through `016.2003`

   The vendors should be displayed as just key:

   Then, only the cumulated balance should be displayed:

Continued on next page

Now restore the original status of the query:

Solution 11: InfoArea for Financials

Task:

1. You would like to see a structured list of the cumulated balances with a comparison of the current fiscal year against the previous year for the area General Ledger Accounting. Call up the BEx Analyzer and execute the query *G/L: Balances structured - accumulated, comp. with prev.year*.

Company code:	**1000**
Financial statement version:	**INT**
Current fiscal year:	**2003**
Posting period:	**Current period**

Deactivate the hierarchy so that you get just the account numbers shown (key) sequentially in the list.

Continued on next page

The accounts should then be shown only as **key**.

a) *Open* *Queries → InfoAreas → Financial Management & Controlling → Financial Accounting → General Ledger Accounting → General Ledger: Transaction Figures → (Query) G/L: Balances structured - accumulated, comparison with previous year* (sixth query in the list)

Place the cursor on this query and execute it (choose *OK*).

b)

Company code:	`1000`
Financial statement version:	`INT`
Current fiscal year:	`2003`
Posting period:	`12`

c) Execute the query.

d) Deactivate the hierarchy so that you get just the account numbers shown (key) sequentially in the list:

Right-click G/L accounts and choose Hierarchy active to deactivate the hierarchy.

e) The accounts should then be shown only as **key**:

Right-click the column G/L Accounts and choose *G/L Accounts → Display as → G/L Account → Key*

f) Restore the original status of the query

Then right-click in one of the result columns and choose *Back to Start*.

2. You would like to obtain a list of account balances and a sales list for your vendors in the area Accounts Payable Accounting. Call up the BEx Analyzer and execute the query

Vendors: Overview

Company code:	`1000`
Period/Fiscal year:	`001.2003` through `016.2003`

The vendors should be displayed as just key:

Then, only the cumulated balance should be displayed:

Continued on next page

Now restore the original status of the query:

a) *Open Queries → InfoAreas → Financial Management & Controlling → Financial Accounting → Accounts Payable Accounting → FIAP: Transaction Data → (Query) Vendors: Overview*

Place the cursor on this query and execute it (choose **OK**).

b) Entries:

Company code:	`1000`
Period/Fiscal year:	`001.2003` through `016.2003`

c) Execute the query.

d) The vendors should be displayed as just key:

Select the column *Vendor* and choose *Vendor → Display as → Key*

e) Only the cumulated balance should be displayed:

Right-click **above** and choose *Structure → Select Filter Value*. Then hold down the Control key and select Debit, Credit, Balance, and Sales, and remove them from the selection by choosing *Remove*

Choose *OK*

f) Restore the original status of the query

Right-click in one of the result columns and choose *Back to Start*.

Lesson Summary

You should now be able to:

- Explain the basics of SAP BW architecture
- Gain an overview of the InfoProviders in Financials

Lesson: InfoCube for Financials

Lesson Overview

In this lesson, you will learn about the basic structure of an InfoCube, using the structure of the InfoCube 0FIAR_C02: FIAR Transaction Data as an example.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the basics of the InfoCube 0FIAR_C02: FIAR Transaction Data

Business Example

Employees in Financial Accounting want to use the SAP BW InfoCube 0FIAR_C02: FIAR Transaction Data. They are primarily interested in finding out about its architecture.

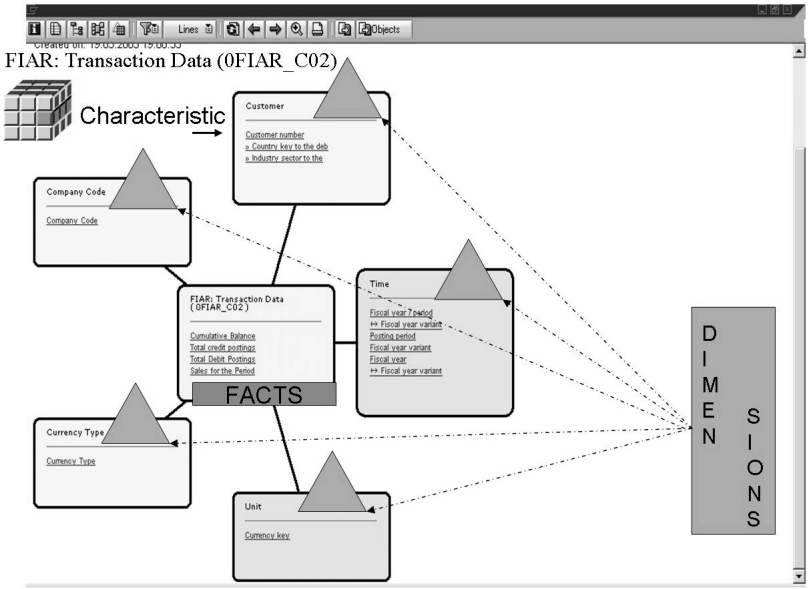

Figure 97: InfoCube: Example

The central data containers on which SAP BW reports and analyses are based are called InfoCubes. They contain two types of data: key figures and characteristics. Each individual InfoCube contains a self-contained dataset, since queries always refer to an InfoCube.

An InfoCube consists of multiple InfoObjects and is set up according to a star schema. It includes a fact table containing the key figures of the InfoCube and multiple dimension tables in which the characteristics of the InfoCube are stored. An InfoCube is assigned to an InfoArea and is supplied with data from one or more InfoSources. A report in the Business Explorer always refers to only one InfoCube.

Fact tables and dimension tables are linked by identifying abstract numbers (IDs) contained in the key part of the respective database table. Fact tables and dimension tables are both relational database tables.

The characteristics of a dimension, with their attributes and text descriptions, refer to the master data.

- Figure 101 shows the structure of the InfoCube 0FIAR_C02: FIAR Transaction Data

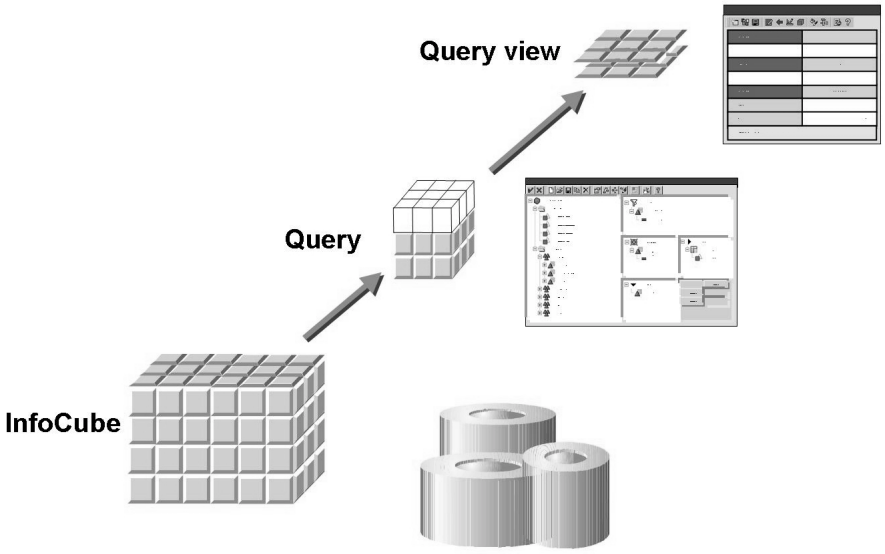

Figure 98: From InfoCube to Worksheet View

You can analyze the dataset of the Business Information Warehouse by defining queries using the data contained in an InfoCube. An InfoCube could be described as a multidimensional cube from which sections are removed whenever characteristics and key figures are chosen in a query definition.

The multidimensionality of query data allows you to generate different views of an InfoCube's dataset. The OLAP Processor compiles queries from the InfoCube data and provides methods to allow multidimensional navigation in the dataset.

The Business Explorer requests the data from the InfoCube and provides an updated view of the dataset. Only the data actually required in the query is transferred. If a new view of data is required during navigation, the OLAP Processor provides it from the InfoCube. The data on the application server is always the data from the current and last drilldown

Lesson Summary

You should now be able to:

- Explain the basics of the InfoCube 0FIAR_C02: FIAR Transaction Data

Lesson: Queries

Lesson Overview

Employees in Financial Accounting want to create and change queries. They want to use navigation options when they are displaying queries and save query outputs in a workbook. They also want to define and use characteristic values and text variables.

Lesson Objectives

After completing this lesson, you will be able to:

- Create and change queries
- Explain and use the navigation options provided for query display
- Save query output in a workbook
- Define and use characteristic value and text variables

Business Example

Employees in Financial Accounting want to create and change queries. They want to use navigation options when they are displaying queries and save query outputs in a workbook.

They also want to define and use characteristic values and text variables.

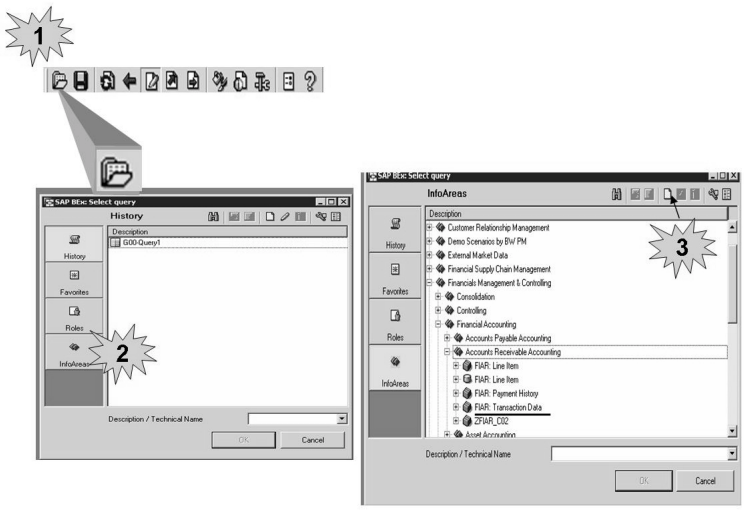

Figure 99: Creating a Query

Procedure when creating a new query:

- From the standard toolbar, choose *Open → Queries*.
- The system displays the selection screen containing all the queries that you have defined (history). You can request a list of the InfoAreas for which you can define a new query. Choose the InfoCube containing the data on which the query is to be based by selecting it with the mouse. You can show the technical names of the InfoCubes by choosing “Technical Name”.

To create a query, choose “New”.

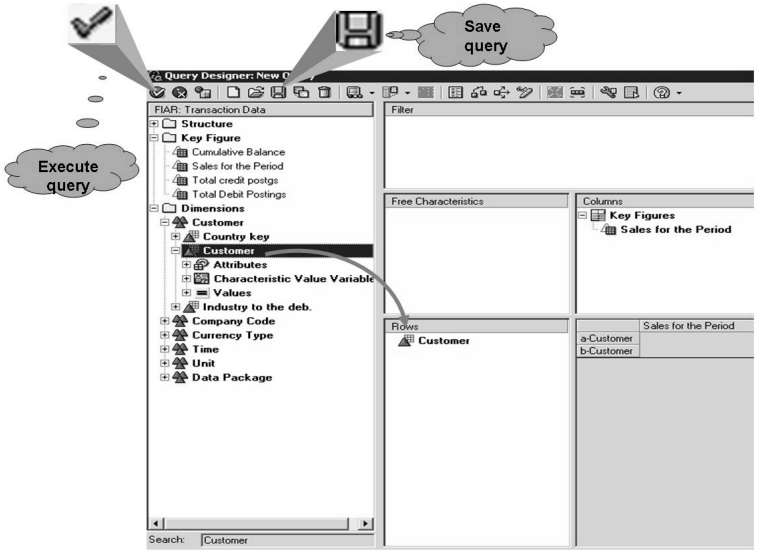

Figure 100: Choosing Characteristics and Key Figures

In a directory tree on the left side of the screen, the system displays the available objects from the InfoCube you choose. These include the key figures and characteristics of the dimensions.

The right side of the screen contains empty directories for filter selection, the lines, the columns, and the free characteristics of the query. The bottom right section contains a preview of the results area for the query. This area is also empty at first.

You can expand and collapse the directories by clicking the plus or minus symbol. For example, you can display a list of all the key figures in the InfoCube by expanding the key figure node in the InfoCube tree.

You can add the InfoCube's characteristics and key figures to the directories for the query definition (filter, rows, columns, free characteristics) using Drag&Drop.

Once you have finished defining your query, you can save it by choosing “Save Query”. You execute the query by choosing “Execute Query”.

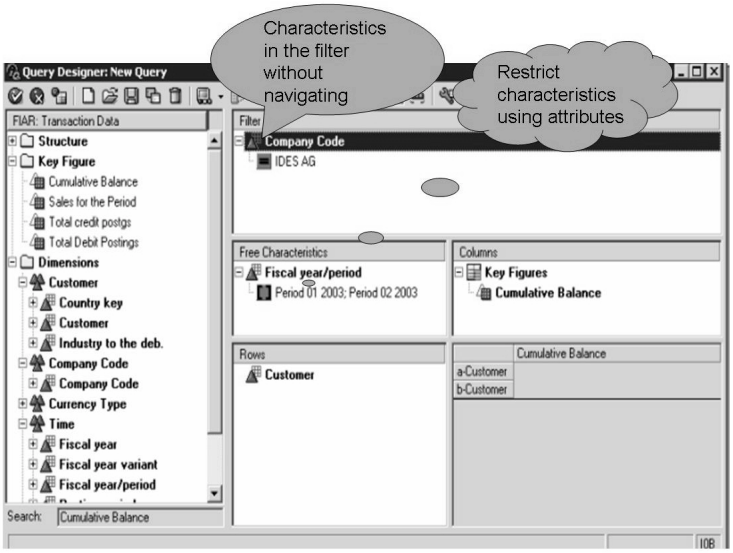

Figure 101: Filtering Data when Defining a Query

When you are defining a query, you can drag characteristics to the columns or rows.

Once you have executed a query, the system does not initially display free characteristics in the workbook, but you can integrate these using navigation steps.

Characteristics in the filter are not shown in the drilldown, nor are they shown as free characteristics in the analysis. They are only used to filter data from the cube.

You can restrict (filter) the characteristic attributes for a characteristic in the rows and in the columns, as well as in the free characteristics and in the filter.

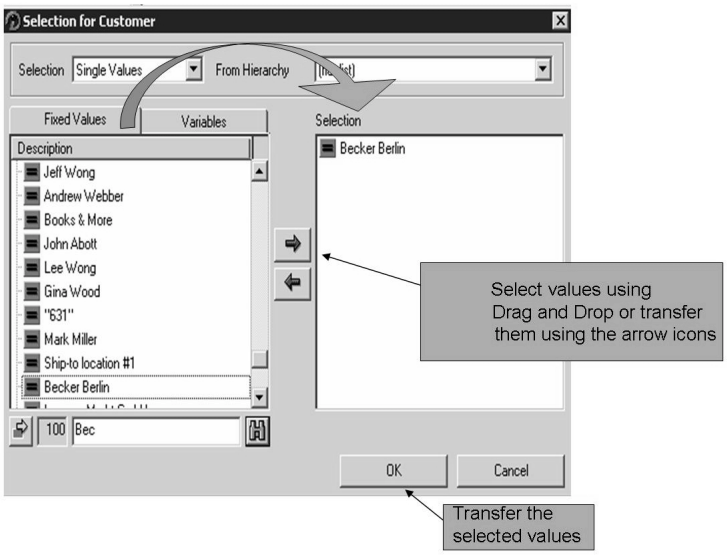

Figure 102: Selection Menu for Restricting Characteristics

There are two ways of restricting characteristics:

- To go to the selection menu, choose a characteristic from the InfoCube (in the tree structure on the left side of the screen) and double-click the icon for the values. On this screen, you can choose individual values or values from a value area and you can restrict these values using hierarchies and nodes.
- You can also go to the selection menu by right-clicking a characteristic in the query definition and choosing *Restrict*.

Within the selection menu, you can choose values from the list by:

- Dragging the selected values from the box on the left to the box on the right (Drag&Drop)
- Transferring the selected characteristics using the arrow icons

You can make multiple selections. Once you have finished selecting characteristics, choose *OK*.

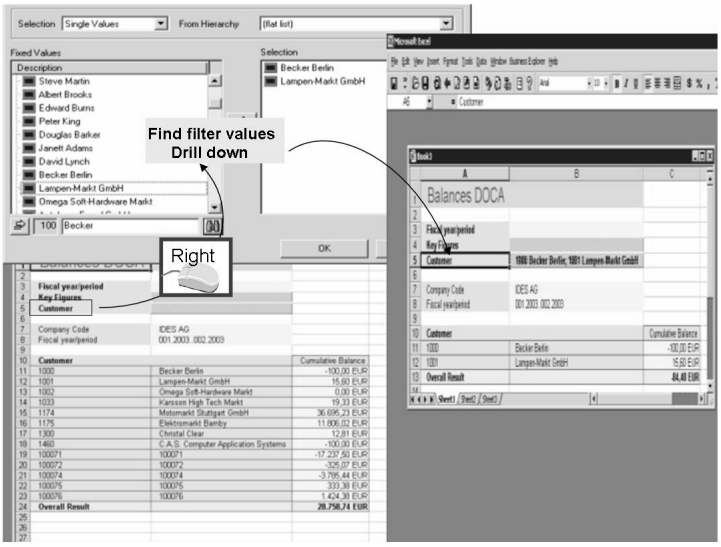

Figure 103: Filtering Data in the Worksheet

Once you have executed a query, you can also filter data in the worksheet using the characteristic attributes in the filter cells and results area.

To filter data using characteristic attributes in the filter cells, right-click the required characteristic.

- To open the selection menu that you can use to filter the required characteristic, choose “Find filter value”. This menu offers a selection of individual values or values from a value area and you can restrict these values using hierarchies and nodes. You restrict your query result to the chosen values by choosing *OK*. To remove the filter value for the corresponding characteristic, choose *Remove filter value*.
- You can also display only one column in your query result. You do this by double-clicking the top of the column. The system then hides all the other columns. The column heading is shown in the filter area in the *Key figure* row. You can reverse this restriction by choosing *Remove filter value*.

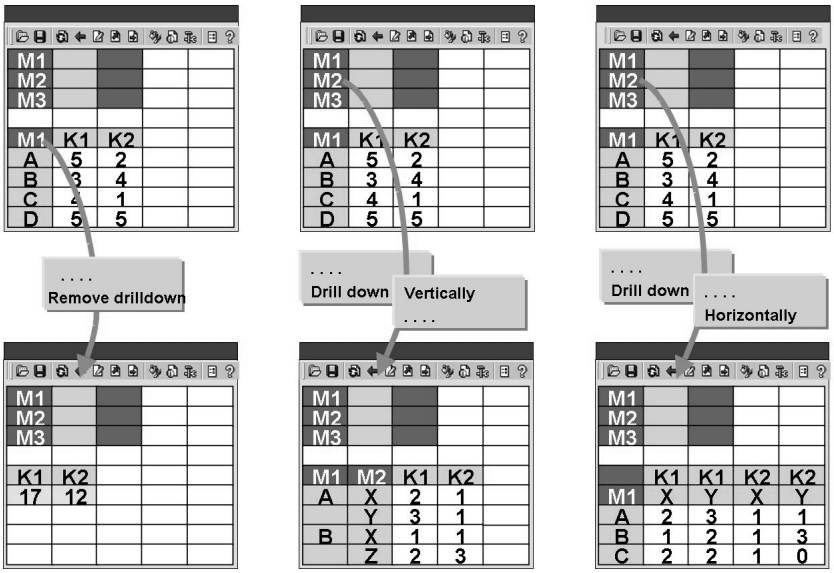

Figure 104: Navigating in the Analysis (2)

A query shows different views of the data in the InfoCube on which the query is based. From the worksheet, you can use navigation functions to generate various views of the query data (navigational states), which are then shown in the results area of the query. The switching of views is known as navigation, and in the Business Explorer the purpose of navigation is to analyze InfoCube data. When you define a query, you specify what the first view of the data will be after it has been added to the workbook.

You can drill down the query result vertically or horizontally for a characteristic in the filter cells. You do this by choosing *Drill down vertically* or *Drill down horizontally*. You can reverse changes you make to the drilldown by choosing *Remove drilldown*.

You can remove the current drilldown for a characteristic by choosing *Remove drilldown* or by double-clicking the characteristic.

You can integrate characteristics in the drilldown by choosing *Drill down vertically* or *Drill down horizontally*. These characteristics are always the last characteristics to be added to the drilldown.

If you choose the *Horizontal drilldown* navigation function, the system always displays all the characteristic attributes for each key figure. To display all the key figures for a characteristic value, choose *Change query*.

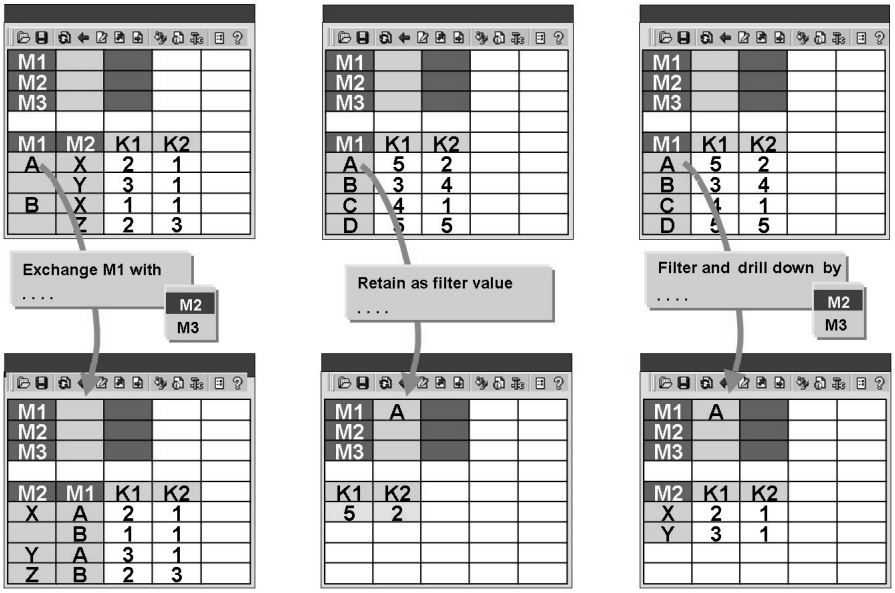

Figure 105: Navigating in the Analysis (2)

To exchange two characteristics, choose *Swap ... with.....* This function allows you to exchange characteristics on the row and column axes of the results area or to exchange a characteristic from the drilldown with a free characteristic, for example.

To retain a selected characteristic value as a filter value, choose *Keep as filter value*. The system then deletes the characteristic from the drilldown and sets the filter on the relevant characteristic attribute.

To define a characteristic on a value (that is, filter) and drill down according to another characteristic on the same axis (row or column axis) in one step, choose *Filter and Drilldown According to*.

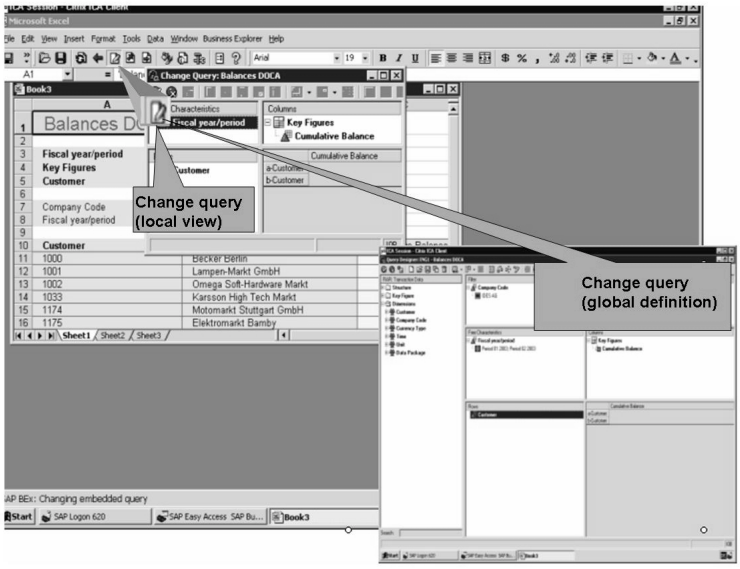

Figure 106: Changing a Query

If you want to change a query, choose *Change Query*.

There are two ways of changing a query:

- If you choose the *Change Query (Local View)* mode, you can only move or restrict the objects that are already contained in the query definition. In addition, when you execute the query again, only the worksheet is updated; the changes are not saved in the query definition.
- On the other hand, if you choose the *Change Query (Global Definition)* mode, the system displays the definition screen and you can use all the functions that were available when you first defined the query. However, before you execute the changed query, the system prompts you to save the changes in the query definition. This changes the original definition of the query.

There are two ways of saving the changed query:

- You can save the changed query under the old name. To do this, choose *Save Query* on the toolbar.
- You can save the changed query under a new name. To do this, choose *Save Query As...* on the toolbar. Enter a new technical name and a new description.

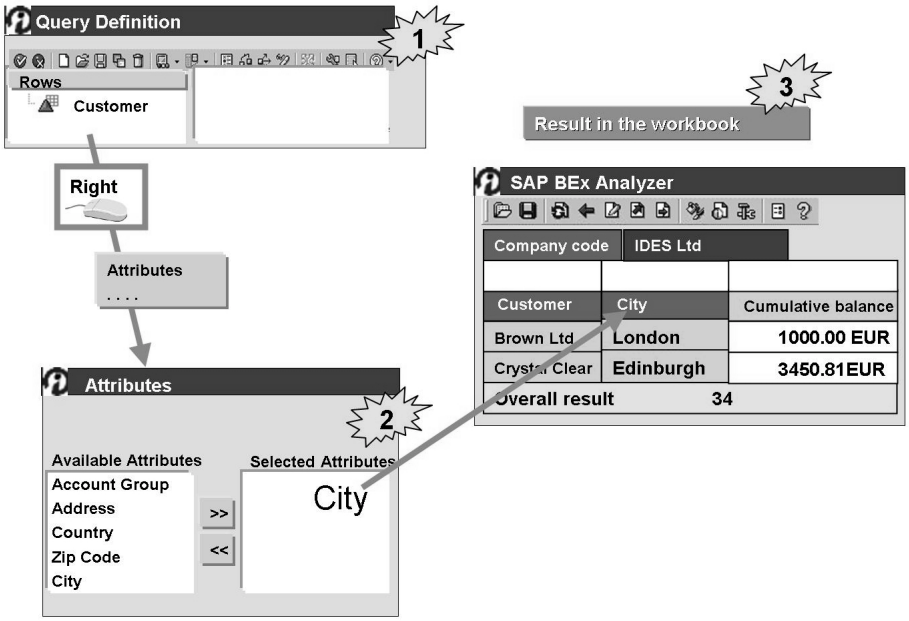

Figure 107: Attributes in the Analysis

If attributes exist for a characteristic, you can display these on the worksheet. To do this, right-click the characteristic concerned in the query definition and choose *Properties*. You can then copy the required attributes and define how you want to display each attribute (as a key or description, or as a key **and** description).

In the query definition, you can define a key date by which the attributes are to be determined by choosing *Query properties* → *Key date*. You can choose the key date from a calendar or define it using a variable that has already been created.

However, you cannot use display attributes for navigation purposes.

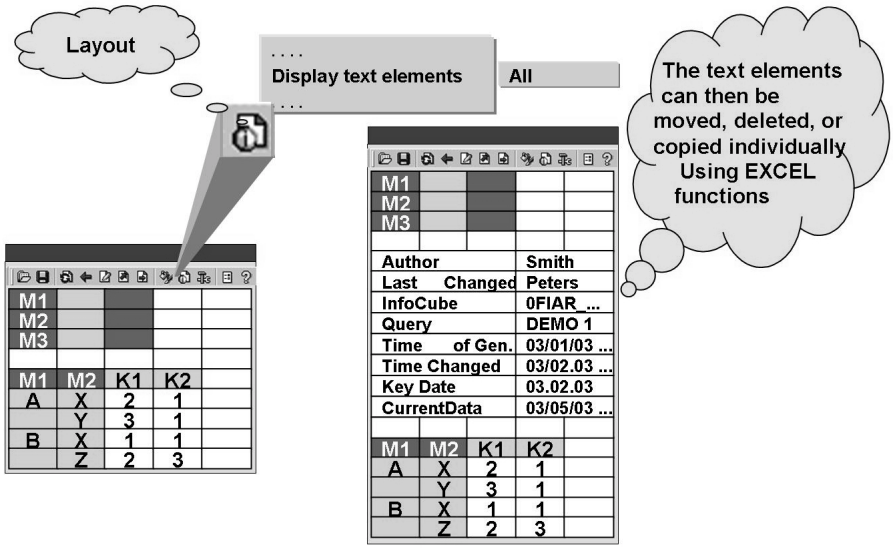

Figure 108: Adding Text Elements

You can display various text elements of a query (for example, author, last changed by, InfoCube, time of generation, and so forth) in a user-defined cell area. These text elements are also known as the query's **header information**.

To integrate a query's text elements in the worksheet, choose *Layout → Display text elements → All*. The system displays all existing text elements between the filter cells and the results area. You can now delete, copy, and move specific text elements using Microsoft Excel functions.

You can also display, as text elements, the characteristics or variables that were previously restricted in the query definition.

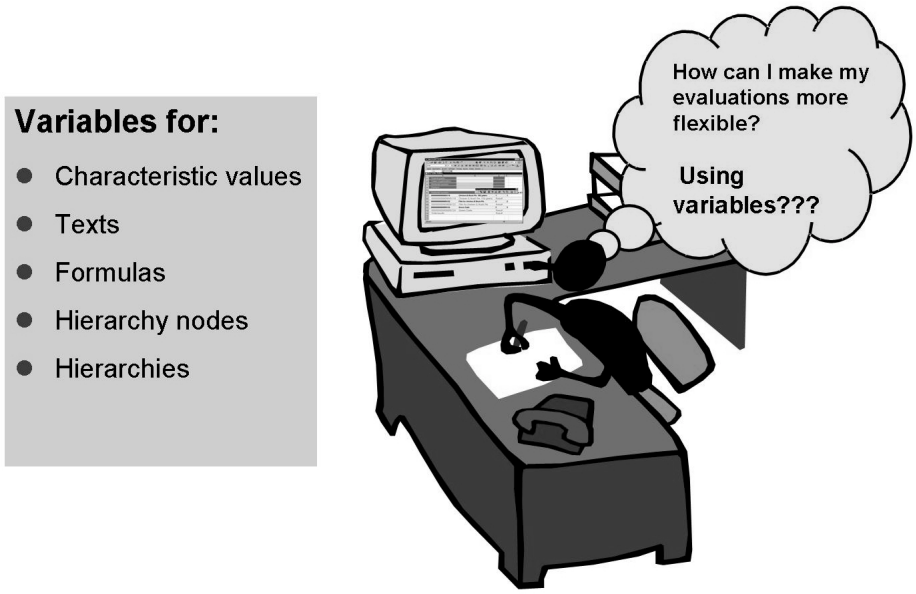

Figure 109: Creating Queries with Variables

You can use variables to make your queries more flexible.

To do this, the variables for characteristic values, texts, formulas, hierarchy nodes, and hierarchies must have been created in SAP BW Variable Maintenance.

The system does not edit the variables or fill them with values until the query is added to a workbook. Depending on the variable type and processing type chosen, the variables can be entered or modified manually, or they can be processed automatically, before the query is executed.

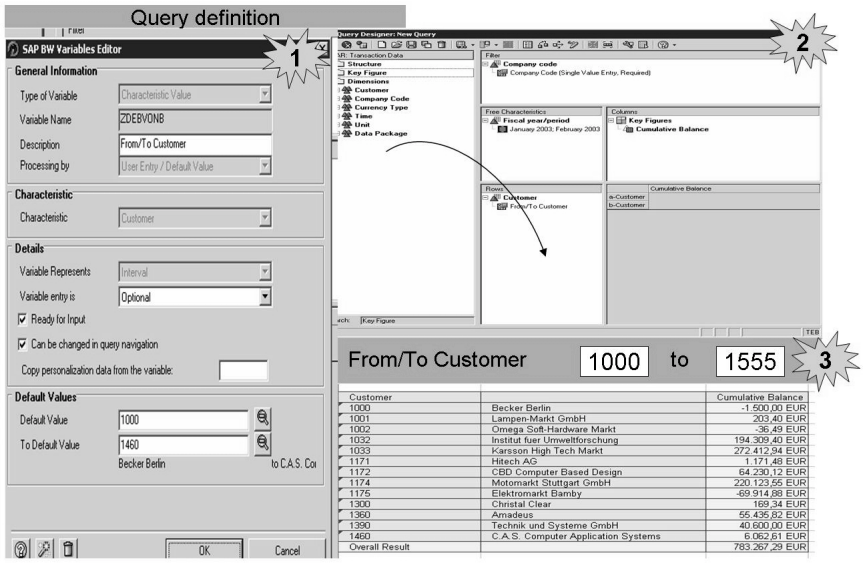

Figure 110: Variables for Characteristic Values

Variables for characteristic values are parameters that are used in the query definition. They are not edited or filled with values until the query is added to the workbook. Variables are placeholders for characteristic values, and can be edited in the following ways: **Manual entry/default value**, **Customer exit**, and **SAP exit**.

To use variables in the query definition, choose the characteristic of the InfoCube that you want to fix to a variable. Expand the characteristics directory and drag the variable for characteristic values to the directory in the query definition using drag and drop.

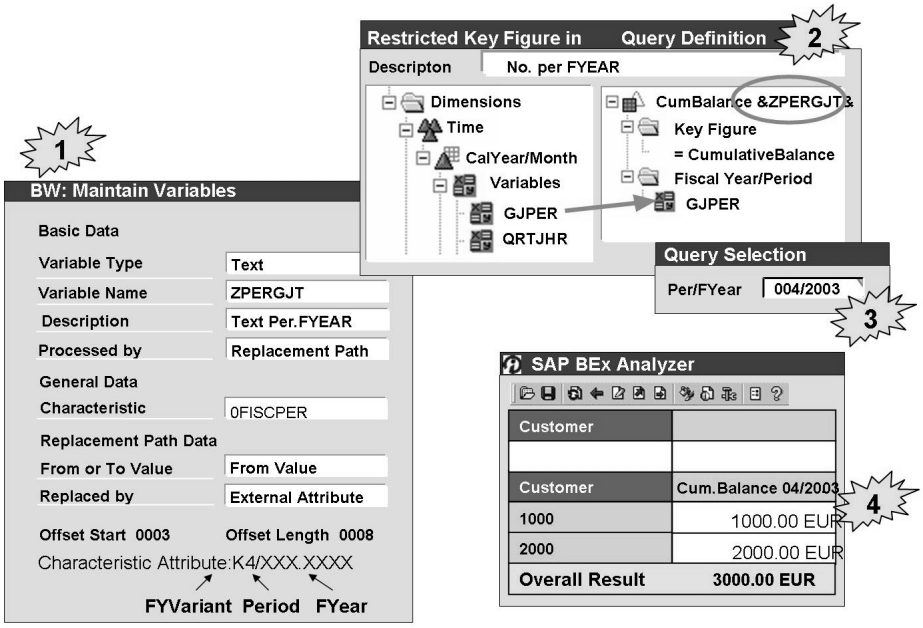

Figure 111: Variables for Texts

Use text variables if you do not want to define row or column texts but want to enter them or determine them from the master data when the query is executed.

You can use all existing processing types for text variables.

Text variables are normally used in combination with **variables for characteristic values**. If you are using a characteristic value variable in a row or column of the query definition, it is advisable to use a text variable. The text variable has to refer to the characteristic for which you are using the characteristic value variable, and it has to be edited using the replacement path.

To use text variables in the query definition, enter the text variable directly in the text fields (for example, for a calculated key figure or structure). The text variable has to start and end with an ampersand (&) and it must not contain blank spaces (for example, &ZPERGJT&).

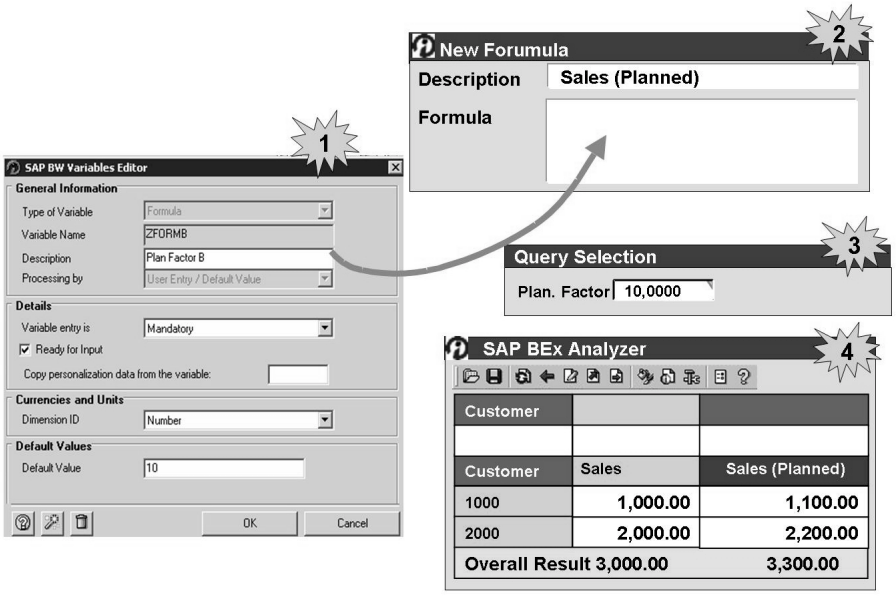

Figure 112: Variables for Formulas

You normally use variables for formulas if you do not want to define part of a formula (a number) but want to enter it when the query is executed. For example, you could use a formula variable for VAT rate so that the current tax rate is entered whenever you add the query to the workbook.

You can use all editing types for formula variables.

To use formula variables in the query definition,

select the *Key figures* directory from the InfoCube tree and, in the context menu, right-click *Newly calculated key figure*. The *Calculated Key Figure* screen appears.

In the operands directory, choose one of the formula variables and add this to the entry field for the formula by double-clicking or using Drag&Drop. Choose *OK*.

When you start the evaluation, you can now enter the number you wish in a dialog box, or accept the default value.

Exercise 12: Insight into SAP BW: Queries

Exercise Objectives

After completing this exercise, you will be able to:

- Create and modify your own queries in the BEx Analyzer
- Navigate in the analysis result for the query and filter data
- Integrate additional information as text elements into the query result
- Define and use value and text variables

Business Example

You have the task of creating some query definitions yourself. You want to implement other analysis functions in the query results.

Hint: The ## symbol is a placeholder for your **group** (01,02,03 ... and so on).

Task 1:

You want to find out the cumulative balances of your customers. Call the BEx Analyzer and create a new query for this purpose.

1. Define a new query using the InfoCube *FIAR: Transaction data* in the "FI Accounts Receivable" InfoArea. The query should have the following layout:

Customer	**Cumulative balance**
1000	1000,00
1100	2000,00
....	....

2. Save the query using the technical name **GR##QUERY1** and the description **AC280 QUERY 1 GR##**.
3. Execute the query.

Continued on next page

Task 2:

Once you have looked at the result, you want to change the query.

Change the query using the BEx Query Designer.

Hint: You can only make permanent changes to the query by choosing "Change Query (Global Definition)". If you change a query in the "Change Query (Local View)" mode, the system updates the worksheet, but does not save the changes in the query definition.

1. You want to find out about customers in company code IDES AG (1000) only, but do not want to display the company code on the worksheet. You want to include the *Customer industry* and the *Fiscal year/Period* as free characteristics. You only want to find out about the **Trade** (TRAD), **high tech** (HITE), and **Engineering** industries (MBAU) and the figures for **December 2002**. You also want to display the *Sales for the period* in the columns.
2. Save your changed query

   Execute the query again.
3. Once you have looked at the result of your changed query, you want to see the result for **Trade** (TRAD) in the analysis.

   Hint: Set the filter for *Trade* (TRAD) in the worksheet.
4. Now remove the filter for *Trade* (TRAD).

Task 3:

To interpret the data, you have to perform various navigation steps. Initially, the customer should be displayed in the rows, and the two key figures *Cumulative balance* and *Sales for period* should be displayed in the columns. After you have performed the navigation steps, the worksheet should be laid out as follows:

1. Display the overall result without characteristics in the drilldown.
2. The *customer industry* should appear **after** the *customer* in the query.

   Hint: Return to the initial display, in which the customer is displayed in the rows and the two key figures *cumulative balance* and *sales for period* are displayed in the columns. Then make the changes.

Continued on next page

Customer industry **Fiscal year/period** **Customer** **Key figures**			
Customer	**Customer industry**	**Cumulative balance**	**Sales for period**
. . . . .	. . . . .	. . . . .	. . . . .

3. Exchange the characteristics *customer* and *customer industry*.

Customer industry **Fiscal year/period** **Customer** **Key figures**			
Customer industry	**Customer**	**Cumulative balance**	**Sales for period**
.....	.....	.....	.....

4. Retain the characteristic value *Trade* (TRAD) (for customer industry) as a filter value and list all the customers for this industry in the row.

Customer industry **Fiscal year/period** **Customer** **Key figures**	Trade (TRAD)	
Customer	**Cumulative balance**	**Sales for period**
.....	.....	.....

5. Now display the figures for a specific customer.

Continued on next page

Customer industry **Fiscal year/period** **Customer** **Key figures**	**XYZ**
Cumulative balance	**Sales for period**
.....	.....

6. Within the customer industries, you now have to display the customers individually. You have to display the *Key* for the industry and the *key* for the customers. Sort the industries *in descending order by key*. **Always** suppress the result rows for the customers. For the industry, you want an **overall result** displayed for the cumulative balance and for the period sales.

Customer industry **Fiscal year/period** **Customer** **Key figures**			
Customer industry	**Customer**	**Cumulative balance**	**Sales for period**
Trade	1001	EUR 1,500.00	1,000.00 EUR
	1002	980.00 EUR	910.00 EUR
	1033	.....	.....
	.....	.....	.....
High tech	1460	3,000.00 EUR	2,500.00 EUR
	.....	.....	.....
Engineering	1000	EUR 5,670.80	3,215.80 EUR
	.....	.....	.....
Overall result		XX,XXX.XX EUR	XX,XXX.XX EUR

7. When you created query **AC280 QUERY 1 GR##**, you filtered characteristics. When you are performing the analysis, you want to display the information that you did not filter (for example, author, last changed by, info provider, technical name, and so forth). Add the text elements to the worksheet.

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8. Save the results of query **AC280 QUERY 1 GR##** as a new workbook in your favorites list. Call the workbook **Query 1 GR## Result**.

Task 4:

You want to find out your customer's sales for the period. In the next exercise you will create and use characteristic variables for the customer characteristic

1. Define a new query using the InfoCube *FIAR: Transaction data* in the "FI Accounts Receivable" InfoArea. You want to filter the query using company code IDES AG (1000). Enter *Fiscal year/Period* as free characteristics. You want to display the customer in the rows and the period sales in the columns.

Customer	Sales for period
1000	1000,00
1100	2000,00
...	...

2. Save the query using the technical name **GR##QUERY2** and the description **AC280 QUERY 2 GR##**.
3. Execute the query.
4. The query output for *AC280 QUERY 2 GR##* lists all customers in the company code IDES AG. In the next output, you want to be able to structure the display of the customer area flexibly. You do not decide on *From and To customers* until you perform the analysis.

   Change query AC280 QUERY 2 GR##. Define a variable for the characteristic *Customer* (InfoObject 0CUSTOMER), which you will need to select customers. This variable is a range that you have to edit manually or by using default values. You have to define it as mandatory and ready for input and it should be possible to change it when you navigate in the query.

   Use the following naming conventions:

   Variable name: DEBVB## Description: From/To Customer GR##

   Enter **1000** as the *default value* and **2000** as the *To default value*.
5. Save query **AC280 QUERY 2 GR##**.
6. Execute query **AC280 QUERY 2 GR##**. Select customers 1000 to 3000.

Continued on next page

Task 5:

Now you will be working with **text variables**. You want to display sales for a specific fiscal year/period and the corresponding heading (for example, 12/2002) as follows:

Customer	**Sales 12/2002**
1000	1000,00
1100	2000,00
....	....

1. Remove the characteristic *Fiscal Year/Period* from the category *Free Characteristics* and *Key Figures* from the columns. Create a new **characteristic value variable** for the fiscal year/period.

   Variable name: ***PERYR##***; description: ***Period/Year ##***.

   Processed by: ***Manual entry default value.***

   Other entries: ***Individual value***, Entry ***obligatory***, ***Ready for input*** and ***Changeable during query navigation***. Enter **12/2002** as the default value.

2. Create a **new structure** for the columns. The structure should contain a **new selection**. The first component of the new selection for the column structure should contain the sales for the period and the second part should contain your variable for the fiscal year/period *Period/Year ##*.

   Choose *Select text variable*.

   Create a new text variable. Variable name: ***PYRTXT##***, Description: ***Per/Year Text ##***, Processed by: ***Replacement path***.

   Other entries: characteristic ***Fiscal year/Period (0FISCPER)***, replace variable with ***External attribute of key***, From value, Offset start: ***0003***, Offset length ***0008***. Enter **Sales &PYRTXT##&** as a description for the new selection.

3. Save query **AC280 QUERY 2 GR##**.

4. Execute query **AC280 QUERY 2 GR##**. Select customers 1000 to 3000 and enter 011/2002 as the period/year ##.

Solution 12: Insight into SAP BW: Queries

Task 1:

You want to find out the cumulative balances of your customers. Call the BEx Analyzer and create a new query for this purpose.

1. Define a new query using the InfoCube *FIAR: Transaction data* in the "FI Accounts Receivable" InfoArea. The query should have the following layout:

Customer	Cumulative balance
1000	1000,00
1100	2000,00
....	....

   a) *Open Queries → InfoAreas → Financial Management & Controlling → Financial Accounting → Accounts Receivable Accounting → Cube FIAR:Transaction Data → New*

Customer	Cumulative balance
1000	1000,00
1100	2000,00
....	....

   Dimensions → Customer → Copy the customer (characteristic) to the rows using drag and drop.

   Key Figure → Copy the cumulative balance to the columns using drag and drop.

2. Save the query using the technical name **GR##QUERY1** and the description **AC280 QUERY 1 GR##**.

   a) ***Choose Save query as → Entry:***

Field name	Values
Description	*AC280 QUERY 1 GR##*
Technical name	*GR##QUERY1*

   Save

Continued on next page

3. Execute the query.

   a) *Execute query*

Task 2:

Once you have looked at the result, you want to change the query.

Change the query using the BEx Query Designer.

Hint: You can only make permanent changes to the query by choosing "Change Query (Global Definition)". If you change a query in the "Change Query (Local View)" mode, the system updates the worksheet, but does not save the changes in the query definition.

1. You want to find out about customers in company code IDES AG (1000) only, but do not want to display the company code on the worksheet. You want to include the *Customer industry* and the *Fiscal year/Period* as free characteristics. You only want to find out about the **Trade** (TRAD), **high**

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tech (HITE), and **Engineering** industries (MBAU) and the figures for **December 2002**. You also want to display the *Sales for the period* in the columns.

a) Choose *Change query* → *Change query (global definition)*.

Dimensions → Company code → Copy the company code to the filter using drag and drop.

Right-click *company code → Restrict → Select individual values → Company code → Select IDES AG → Select with pushbutton → OK*

Dimensions → Customer → Copy the industry to the free characteristics using drag and drop.

Right-click *Customer industry → Restrict → Select individual values → Industry* Select " (TRAD) Trade" → *Select with pushbutton → OK* Select "(HITE) High tech" and "(MBAU) Manufacturing" using the same procedure

Copy *Dimensions → Time → Fiscal year/Period* to the free characteristics using drag and drop. The Fiscal year/Period characteristic is moved too. You can remove this characteristic in the same way using drag and drop to the left.

Right-click Fiscal year/Period and choose Restrict → (click down arrow). Display Other Values →

Restriction(s): Enter Fiscal year/Period 012.2002: Add: OK

Double-click December 2002

OK

Key figure → Copy the sales for the period into the columns using drag and drop.

2. Save your changed query

Execute the query again.

a) *Execute query*

3. Once you have looked at the result of your changed query, you want to see the result for **Trade** (TRAD) in the analysis.

Hint: Set the filter for *Trade* (TRAD) in the worksheet.

a) *Right-click the customer industry → Find filter value → Select individual values →. Double-click TRAD → OK.*

Continued on next page

4. Now remove the filter for *Trade* (TRAD).

   a) *Right-click the Customer industry → Remove filter value.*

Task 3:

To interpret the data, you have to perform various navigation steps. Initially, the customer should be displayed in the rows, and the two key figures *Cumulative balance* and *Sales for period* should be displayed in the columns. After you have performed the navigation steps, the worksheet should be laid out as follows:

1. Display the overall result without characteristics in the drilldown.

   a)

Customer's industry Fiscal year/Period **Customer** **Key figures**	
Cumulative balance	**Sales for period**
.....	.....

   Right-click *Customer → Remove drilldown*.

2. The *customer industry* should appear **after** the *customer* in the query.

Hint: Return to the initial display, in which the customer is displayed in the rows and the two key figures *cumulative balance* and *sales for period* are displayed in the columns. Then make the changes.

Continued on next page

Customer industry **Fiscal year/period** **Customer** **Key figures**			
Customer	**Customer industry**	**Cumulative balance**	**Sales for period**
. . . . .	. . . . .	. . . . .	. . . . .

a) *Right-click Operating Concern and choose Return to Start.*

Right-click *Customer industry* → *Drilldown* → *Vertically*.

3. Exchange the characteristics *customer* and *customer industry*.

Customer industry **Fiscal year/period** **Customer** **Key figures**			
Customer industry	**Customer**	**Cumulative balance**	**Sales for period**
.....	.....	.....	.....

a) ***Right-click the customer column → Exchange customer with customer industry***

4. Retain the characteristic value *Trade* (TRAD) (for customer industry) as a filter value and list all the customers for this industry in the row.

Customer industry **Fiscal year/period** **Customer**	Trade (TRAD)	

Continued on next page

Key figures		
Customer	**Cumulative balance**	**Sales for period**
.....	.....	.....

a) ***Right-click the customer industry → Find filter value → Select individual values →. Double-click TRAD → OK.***

Double-click the Customer Industry column. This displays a list of all customers with the characteristic value *TRAD*.

5. Now display the figures for a specific customer.

Customer industry **Fiscal year/period** **Customer** **Key figures**	**XYZ**
Cumulative balance	**Sales for period**
.....	.....

a) Right-click *Customer industry* → *Remove filter value* and double-click the *Customer* column.

Right-click *Customer* → *Find filter value* → *Select individual values*. Double-click a *Customer* (for example, Becker Berlin), choose *OK*.

6. Within the customer industries, you now have to display the customers individually. You have to display the *Key* for the industry and the *key* for the customers. Sort the industries *in descending order by key*. **Always** suppress the result rows for the customers. For the industry, you want an **overall result** displayed for the cumulative balance and for the period sales.

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Customer industry **Fiscal year/period** **Customer** **Key figures**			
Customer industry	**Customer**	**Cumulative balance**	**Sales for period**
Trade	1001	EUR 1,500.00	1,000.00 EUR
	1002	980.00 EUR	910.00 EUR
	1033	.....	.....
	.....	.....	.....
High tech	1460	3,000.00 EUR	2,500.00 EUR
	.....	.....	.....
Engineering	1000	EUR 5,670.80	3,215.80 EUR
	.....	.....	.....
Overall result		XX,XXX.XX EUR	XX,XXX.XX EUR

a) ***Remove filter value for customer***

Right-click Customer and choose Remove filter value.

- ***Double-click Customer Industry. This drills down the individual customer industries in the row.***
- ***Double-click Customer. This drills down the individual customers in the row, to the right of the customer industries***.
- **Right-click the *Customer industry* column and choose *Customer industry → Display as → Key***
- **Right-click the *Customer industry* column and choose *Customer industry → Suppress results rows →*** *Conditional.*
- **Right-click the *Customer industry* column.** Sort in descending order by key.
- **Select the *Customer* column with the right-hand mouse and choose *Customer → Display as → Key***
- ***Select the Customer column with the right-hand mouse and choose Customer → Suppress Results Rows →***

  Always

Continued on next page

7. When you created query **AC280 QUERY 1 GR##**, you filtered characteristics. When you are performing the analysis, you want to display the information that you did not filter (for example, author, last changed by, info provider, technical name, and so forth). Add the text elements to the worksheet.

   a) ***Layout → Display text elements → All.***

8. Save the results of query **AC280 QUERY 1 GR##** as a new workbook in your favorites list. Call the workbook **Query 1 GR## Result**.

   a) *Save query* *Save as new workbook*

   In the "*Description*" field, enter *Query1 GR## Result*, and choose *Save.*

Task 4:

You want to find out your customer's sales for the period. In the next exercise you will create and use characteristic variables for the customer characteristic

1. Define a new query using the InfoCube *FIAR: Transaction data* in the "FI Accounts Receivable" InfoArea. You want to filter the query using company code IDES AG (1000). Enter *Fiscal year/Period* as free characteristics. You want to display the customer in the rows and the period sales in the columns.

Customer	**Sales for period**
1000	1000,00
1100	2000,00
...	...

   a) *Dimensions → Company code → Characteristic*. Drag the *company code* to the filter using *drag and drop*.

   Right-click company code → Restrict → Select individual values → Company code → Select IDES AG → Select with pushbutton → OK

   Copy *Dimensions → Time → Fiscal year/Period* ***to the free characteristics using drag and drop. The Fiscal year/Period characteristic is moved too. You can remove this characteristic in the same way using drag and drop to the left.***

   Choose *Dimensions → Customer*. Drag the *customer* characteristic to the rows using drag and drop.

   Key figure: Copy the sales for the period into the columns using drag and drop.

Continued on next page

2. Save the query using the technical name **GR##QUERY2** and the description **AC280 QUERY 2 GR##**.

   a) ***Choose Save query as → Entry:***

Field name	Values
Description	*AC280 QUERY 2 GR##*
Technical name	*GR##QUERY2*

   OK

3. Execute the query.

   a) ***Execute query***

4. The query output for *AC280 QUERY 2 GR##* lists all customers in the company code IDES AG. In the next output, you want to be able to structure the display of the customer area flexibly. You do not decide on *From and To customers* until you perform the analysis.

   Change query AC280 QUERY 2 GR##. Define a variable for the characteristic *Customer* (InfoObject 0CUSTOMER), which you will need to select customers. This variable is a range that you have to edit manually or by using default values. You have to define it as mandatory and ready for input and it should be possible to change it when you navigate in the query.

   Use the following naming conventions:

   Variable name: DEBVB## Description: From/To Customer GR##

Continued on next page

Enter **1000** as the *default value* and **2000** as the *To default value*.

a) Choose *Change query* → *Change query (global definition)*.

Expand the node for the dimension Customer. Expand the node for the characterisitc Customer.

Place the cursor on characteristic value variables for customer. Right-click

Characteristic value variables for customer → New variable → Continue →

Variable name:DEBVB##:

Description: From/To Customer-GR##

Edit manually/Copy default value.

→ Continue

Variable represented: Choose *Interval*

In the *Variable entry is* field, choose *Obligatory.*

Accept Ready for input .

Select *Changeable for Query Navigation*.

→ Continue.

Enter *1000* as the **default value** and *2000* as the **To default value**.

→ Continue → Exit.

Expand the node for characteristic variables (customer) → Characteristic value variables . Copy From/to customer GR## to the rows using drag and drop.

5. Save query **AC280 QUERY 2 GR##**.

   a) Save query *AC280 QUERY 2 GR##*

6. Execute query **AC280 QUERY 2 GR##**. Select customers 1000 to 3000.

   a) Execute query **AC280 QUERY 2 GR##** . Select customers 1000 to 3000.

Continued on next page

Task 5:

Now you will be working with **text variables**. You want to display sales for a specific fiscal year/period and the corresponding heading (for example, 12/2002) as follows:

Customer	**Sales 12/2002**
1000	1000,00
1100	2000,00
....	....

1. Remove the characteristic *Fiscal Year/Period* from the category *Free Characteristics* and *Key Figures* from the columns. Create a new **characteristic value variable** for the fiscal year/period.

   Variable name: ***PERYR##***; description: ***Period/Year ##***.

   Processed by: ***Manual entry default value.***

   Other entries: ***Individual value***, Entry ***obligatory***, ***Ready for input*** and ***Changeable during query navigation***. Enter **12/2002** as the default value.

   a) Choose *Change query* → *Change query (global definition)*.

      Double-click the characteristic variables icon below the *Fiscal year/Period*

      Continue.

      Enter variable name: PERYR## and description: Period/Year ##

      Processed by: *Edit manually/Copy default value*.

      Continue.

      Variable represented: *Enter* ***Individual value***

      Variable entry is: *Enter Obligatory*

      Accept *Ready for input*.

      Continue.

      Enter *12/2002* **as the default value**.

      Continue.

      Exit.

Continued on next page

2. Create a **new structure** for the columns. The structure should contain a **new selection**. The first component of the new selection for the column structure should contain the sales for the period and the second part should contain your variable for the fiscal year/period *Period/Year ##*.

   Choose *Select text variable*.

   Create a new text variable. Variable name: ***PYRTXT##***, Description: ***Per/Year Text ##***, Processed by: ***Replacement path***.

Continued on next page

Other entries: characteristic ***Fiscal year/Period (0FISCPER)***, replace variable with ***External attribute of key***, From value, Offset start: ***0003***, Offset length ***0008***. Enter **Sales &PYRTXT##&** as a description for the new selection.

a) **In the *Columns* area, remove the *Key Figures* columns by dragging *Key Figures* into the left column using drag and drop.**

Place the cursor the columns and choose *New Structure* from the context menu.

Place the cursor on *Structure* and choose *New Selection* from the context menu.

Move *Sales for period* to the right using drag and drop.

Dimensions → Time → Characteristic Fiscal Year/Period . Copy *Characteristic value variable Period/Year ##* to the right below your key figure using drag and drop. The Fiscal year/Period characteristic is moved too. Remove the characteristic again by dragging it to the left.

Choose Select text variable .

Create a new text variable: *Choose New.*

→ Continue

Variable name:*PYRTXT##.*

Description: *Per/Year Text ##*

Processed by: *Replacement path*

→ Continue

Characteristic: Fiscal year/period (0FISCPER)

→ Continue

Replace variable with: External attribute of key

Offset Start: *0003* ***Offset Length:****0008.*

Exit.

Enter ***Sales &PYRTXT##&as a description for the new selection.***Choose ***OK.***

3. Save query **AC280 QUERY 2 GR##**.

a) Save query *AC280 QUERY 2 GR##*.

Continued on next page

4. Execute query **AC280 QUERY 2 GR##**. Select customers 1000 to 3000 and enter 011/2002 as the period/year ##.

   a) Execute query **AC280 QUERY 2 GR##** .

   Select customers 1000 to 3000 and enter 011/2002 as the period/year ##.

Lesson Summary

You should now be able to:

- Create and change queries
- Explain and use the navigation options provided for query display
- Save query output in a workbook
- Define and use characteristic value and text variables

Lesson: Exceptions, Conditions, and Other Query Properties

Lesson Overview

Once they have created queries, employees in Financial Accounting want to work with exceptions, conditions, and sender/receiver report assignments.

Lesson Objectives

After completing this lesson, you will be able to:

- Define conditions and exceptions and use them when you display a query
- Tailor certain properties of queries to your requirements
- Add queries to existing workbooks

Business Example

Once they have created queries, employees in Financial Accounting want to work with exceptions and conditions.

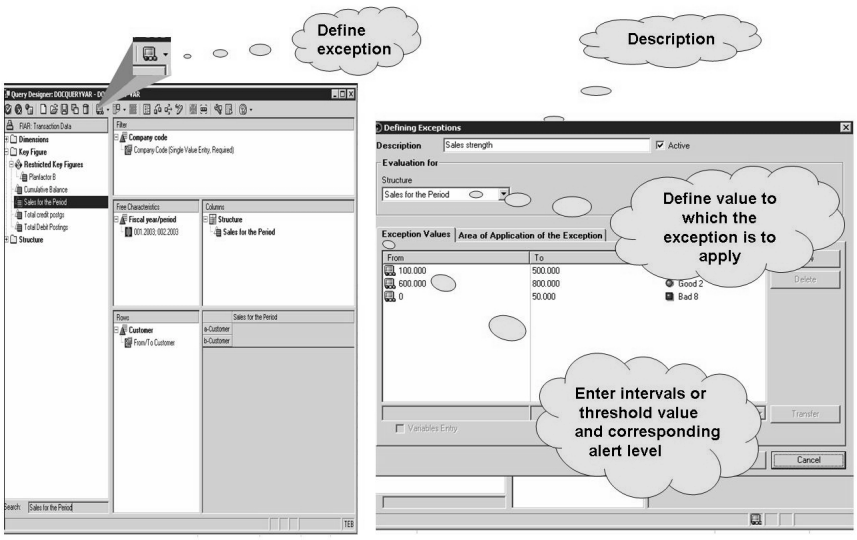

Figure 113: Defining Exceptions

You can define a global exception at query level. This then applies to the query in all workbooks.

Procedure:

- Using Drag&Drop, drag the required key figures to the directories in the query definition.
- To display the entry screen on which you define exceptions, choose *Exception → New exception*.

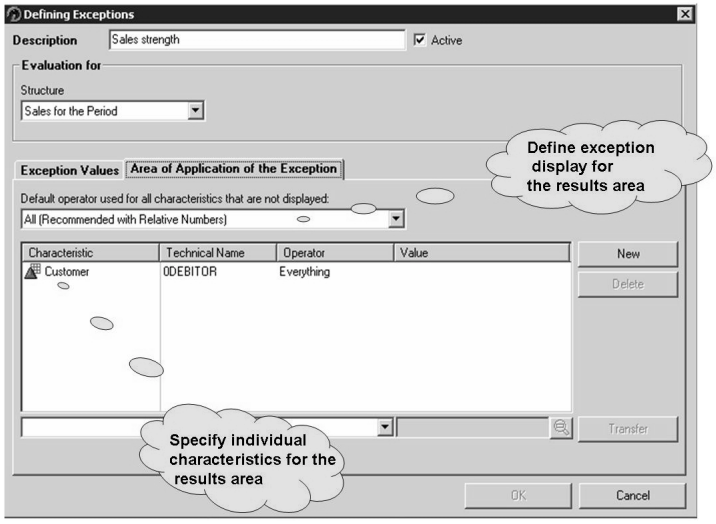

Figure 114: Exception Attributes: Cell Restrictions

Procedure when defining an exception:

- In the *Description* field, enter a name for the exception.
- Enter the key figures to which you want to apply the exception. There are two ways of doing this: You can perform the exception for all the key figures in the query definition, or you can display the exception for a specific key figure.
- On the *Exception Values* tab page, specify the threshold values or ranges to which you want to assign a message priority. Message priorities are used to preassign the color values that are shown in the query result. As the difference between the query result and the predefined values increases, the color displayed changes and can become deeper to reflect a higher "warning" level. There are nine different shades of green, yellow and red (traffic light colors).
- To define a new interval, choose *New* and enter the *From* and *To* values in the corresponding fields. There is a switch to enable you to underlay the interval with a color. Once you have entered the appropriate warning color, choose *Copy* to copy the new exception interval.
- If there are consecutive intervals with overlapping limit values, this value is displayed only once and is underlaid with the **color that represents the highest warning level**, thus displaying the worst case scenario.

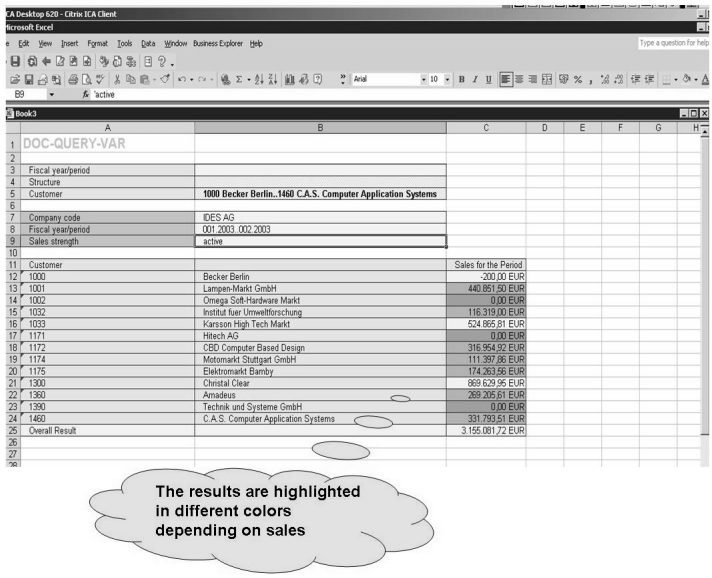

Figure 115: Exception: Result in Worksheet

The query result shows the values defined in the exception underlaid with various colors. The colors represent the degree of variance.

To change the exception, choose *Exceptions* and *Change exception* in the query definition. The system then provides all the functions used to define exceptions again.

You can also enter exceptions in the worksheet (right-click in the results area - exceptions). However, these exceptions can only be used locally in the current query.

If you have large quantities of data, you can also process exceptions in the background. To do this, define the relevant settings in the Reporting Agent. The system then displays and logs the results in the alert monitor.

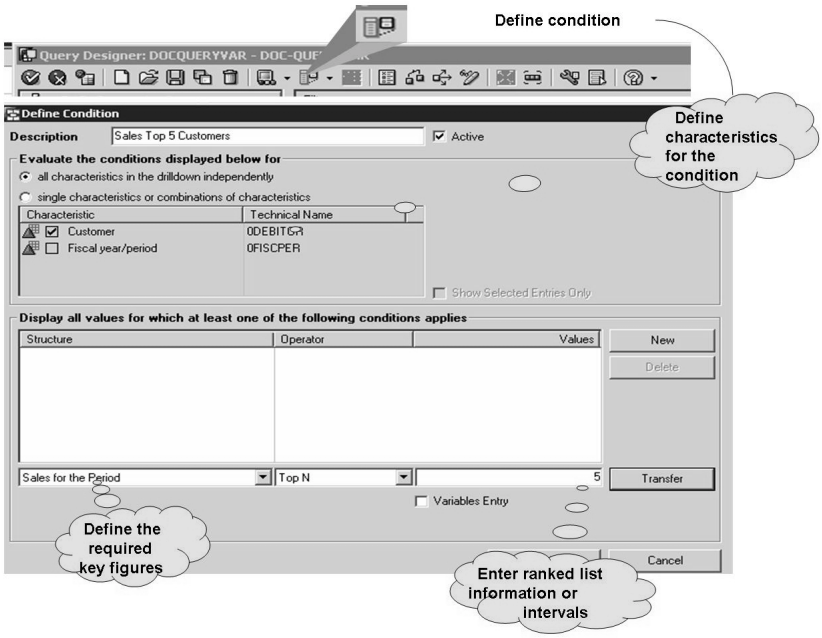

Figure 116: Defining a Condition

Procedure when creating a condition: In the *Description* field, enter a name for your condition. Make sure that the *Active* checkbox is selected (this activates the condition). In the *Evaluate conditions below for... to* field, enter the characteristics to which you wish to apply the condition. There are two options:

All characteristics independent in drilldown: The condition is used for all characteristics in the query. You can navigate freely within the worksheet to change the characteristics display, and the condition will be taken into account for all characteristics.

Single characteristics and characteristic combinations: If you select this option, the system displays all the characteristics for the query in the bottom window. In this window, you can choose one or more characteristics for which you wish to display the condition. **Selecting characteristics in this way acts as a filter for the condition.** For characteristics that are not selected and thus not restricted, the system continues to display all the values in the query.

Define the condition in the *Present all values that fulfil at least one of the following conditions* field at the bottom of the screen. Define a condition by choosing *New* and choosing the key figure and then the operator in the pulldown menus (for example, Top N, Bottom N, is less than or equal to, is greater than or equal to). In the *Values* field, enter the appropriate measure (amount, figures, or percentage). To copy your condition, choose *Copy* and confirm your entry by choosing *OK*.

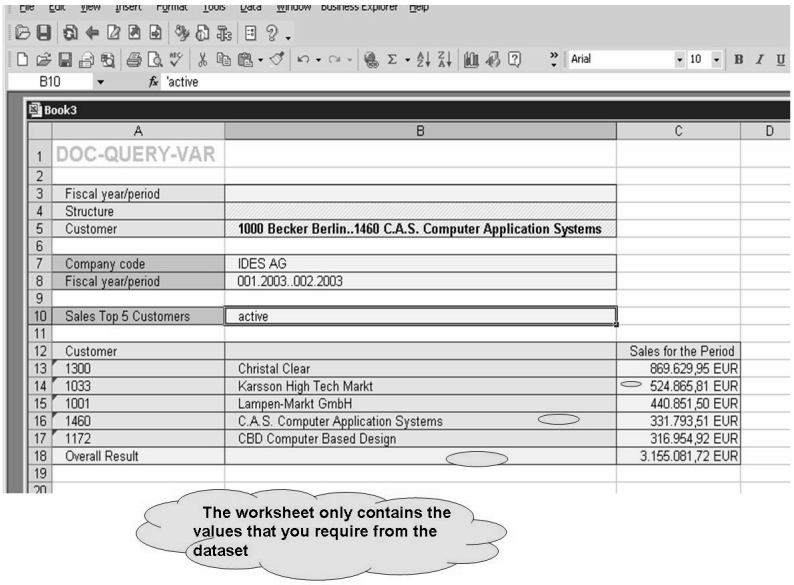

Figure 117: Condition: Result in Worksheet

On the worksheet, the system displays only the values that you require.

To change the condition, choose *Conditions* and *Change condition* in the query definition. The system again provides all the functions used to define conditions.

You can also enter conditions in the worksheet (right-click in the results area - conditions). However, these conditions can only be used locally in the current query.

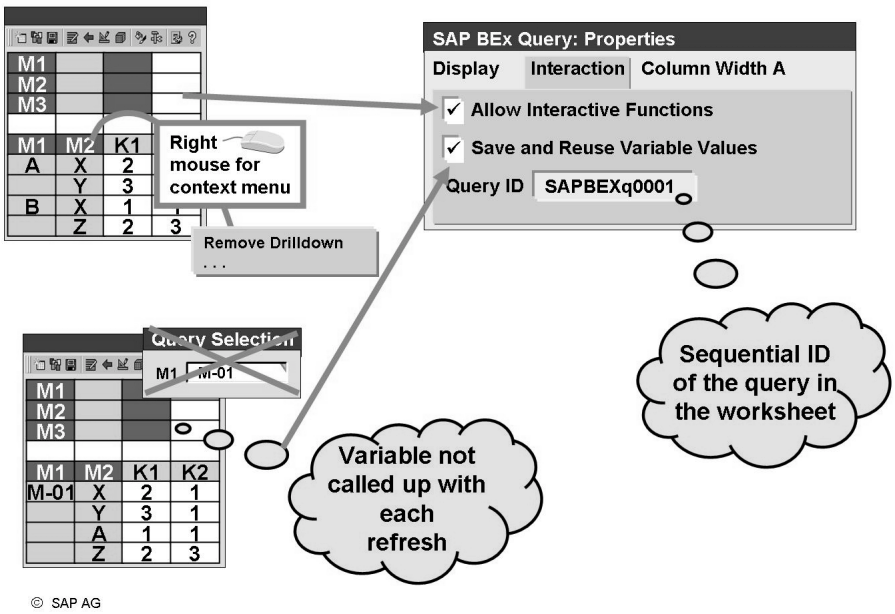

Figure 118: Properties of q ueries: Interaction

In the standard system, interactive functions such as navigate or refresh are permitted in a workbook. If you want to prevent users from navigating in the query results or from changing the view of the data, deactivate the function *Allow Interactive Functions*.

If input variables are used in a query, you can enter values for variables when adding the query to the workbook or accept the default values. If you want to save and reuse any variable values, activate this function. In this way, you do not need to enter the values for the variables each time you refresh the data. With the default settings, this function is not activated.

If you want your query to be refreshed when you open the workbook, activate the corresponding function.

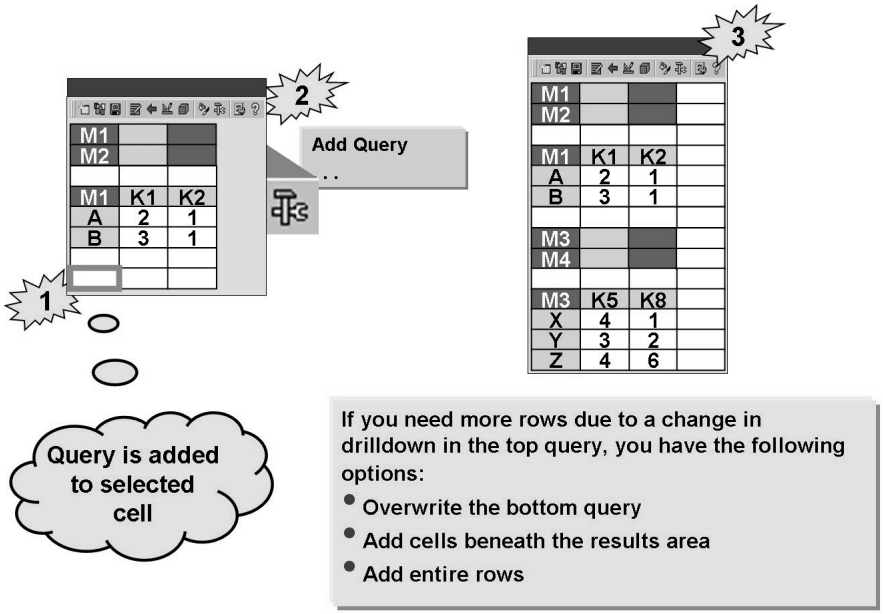

Figure 119: Adding Queries

Queries are always inserted in the workbook at the point where the cursor is located. Queries from different InfoCubes can be inserted in the same workbook.

If you have inserted several queries in a workbook, switching the drilldown within a query can lead to a conflict with the operating concern of another query. This applies to the area beside the query to be changed as well as to the area beneath it. The system recognizes the conflict and offers you three options:

- You can let the operating concern of the other query be overwritten.
- You can have cells inserted beneath the query or beside it.
- You can have entire lines or columns inserted.

Exercise 13: Insight into SAP BW: Queries

Exercise Objectives

After completing this exercise, you will be able to:

- Create exceptions and conditions and use them for results
- Tailer queries to your needs
- Add queries to existing workbooks

Business Example

You have the task of creating various query definitions. You want to use additional analysis functions in the query results.

Hint: The ## symbol is a placeholder for your **group** (01,02,03 ... and so on).

Task 1:

You want to display the **top 10** customer sales figures for this period. You also want to highlight sales that fall between **200,000 EUR** and **400,000 EUR**.

1. Change query **AC280 QUERY 2 GR##**. Create a *new condition* with the description *GR##-CONDITION*. You want to apply this condition to the characteristic *Customer (0CUSTOM)* only. Enter the operators **Top N** and **10** for the key figure *Sales &PYRTXT##&*. Accept your entries and choose *OK*.
2. Create a *new exception* with the description *GR##-EXCEPTION*. Enter the structure *Sales &PYRTXT##&*. Create the values for the exception: *From value* **200,000**, *To value* **400,000**, and an alert level (for example, green 2, good).

   Accept your entries. To restrict the cells (area of validity for the exception), choose *All (recommended for relative quantities)* and choose the characteristics *Customer* and *All* (all balances). Accept your entries and choose *OK*.
3. Save query **AC280 QUERY 2 GR##**.
4. Execute query **AC280 QUERY 2 GR##**. Select customers 1000 to 3000 and enter **012/2002** as the period/year ##.
5. Save the results of query **AC280 QUERY 2 GR##** as a new workbook in your favorites list. Call the workbook **Query 2 GR## Result**.

Continued on next page

Task 2:

Optional

1. You now want to change some properties of your analysis in your worksheet. Execute your query AC280 QUERY1 GR## (## = your grpup number). As the filter value for your customers, enter the value range 1000 through 2000 (Becker Berlin through Carbor GmbH). Deactivate the interactive functions of your query output.

   Once you have viewed your workbook again and have tested the new settings, activate the interactive functions again and then remove the filter value for the customers.

2. Add the query you created *AC280 QUERY2 GR##* (## = your group number) to the worksheet alongside query *AC280 QUERY1 GR##* (## = your group number).

   Hint: To insert the second query, select a cell in Excel column **F** alongside your query already located in the worksheet (for example, line 1, column F)

   Enter customer 1000 to customer 2000 and period 012 in year 2002. As the filter value for your customers for AC280 QUERY1 GR##, enter the value range 1000 through 2000 (Becker Berlin through Carbor GmbH). Remove exception GR##-EXCEPTION from the second query (*AC280 QUERY2 GR##*).

   Update (refresh) your second query (AC280 QUERY2 GR##). You are required to enter the value of the variable for period/year. Accept the entries and execute the query again.

   Save the results of the two queries jointly as a new workbook with the description *2 Queries GR##.*

3. Now execute your three workbooks consecutively:

   • *Result Query 1 GR##*

   • *Result Query 2 GR##* and

   • *2 Queries GR##*

Solution 13: Insight into SAP BW: Queries

Task 1:

You want to display the **top 10** customer sales figures for this period. You also want to highlight sales that fall between **200,000 EUR** and **400,000 EUR**.

1. Change query **AC280 QUERY 2 GR##**. Create a *new condition* with the description *GR##-CONDITION*. You want to apply this condition to the characteristic *Customer (0CUSTOM)* only. Enter the operators **Top N** and **10** for the key figure *Sales &PYRTXT##&*. Accept your entries and choose *OK*.

   a) Choose *Change query* → *Change query (global definition)*.

   Choose *Condition* → *New condition*.

   Enter the description **`G##-CONDITION`** and select the *Active* field.

   Choose *Evaluate conditions below for* → *Individual characteristics and characteristic combinations. Select the field before Customer.*

   Choose *Present all values that fulfil at least one of the following conditions*: *New*.

   → ***Enter the following:***

Key figures	Operator	Values
Sales &PYRTXT&	Top N	10

   Choose *Copy*.

   Choose *OK*.

2. Create a *new exception* with the description *GR##-EXCEPTION*. Enter the structure *Sales &PYRTXT##&*. Create the values for the exception: *From value* **200,000**, *To value* **400,000**, and an alert level (for example, green 2, good).

Continued on next page

Accept your entries. To restrict the cells (area of validity for the exception), choose *All (recommended for relative quantities)* and choose the characteristics *Customer* and *All* (all balances). Accept your entries and choose *OK*.

a) Choose the *Exception* button and then choose *New exception*.

Enter the description **`G##-EXCEPTION`** and select the *Active* field.

Choose *Evaluation for* → *Structure* → *Sales &PYRTXT##&*.

Choose *Values for exception tab page* → *New* and enter the following in the columns:

From	To	Alert level
200000	400000	Good 2

Copy

On the *Exception: Area or Validity* tab page, choose *Area of validity for all characteristics that are not shown* → *All* (recommended for relative quantities).

Choose *New*.

Characteristic: *Customer Operator*: *All*

Choose *Copy*.

Choose *OK*.

3. Save query **AC280 QUERY 2 GR##**.

a) ***Save query***

4. Execute query **AC280 QUERY 2 GR##**. Select customers 1000 to 3000 and enter **012/2002** as the period/year ##.

a) ***Execute query***

5. Save the results of query **AC280 QUERY 2 GR##** as a new workbook in your favorites list. Call the workbook **Query 2 GR## Result**.

a) **Choose *Save* → *Save as new workbook in your favorites list.***
Description: `Query 2 GR## Result`.

Continued on next page

Task 2:

Optional

1. You now want to change some properties of your analysis in your worksheet. Execute your query AC280 QUERY1 GR## (## = your grpup number). As the filter value for your customers, enter the value range 1000 through 2000 (Becker Berlin through Carbor GmbH). Deactivate the interactive functions of your query output.

   Once you have viewed your workbook again and have tested the new settings, activate the interactive functions again and then remove the filter value for the customers.

   a) Execute your query *AC280 QUERY1 GR##* (## = your grpup number).

   b) Open the BEx Analyzer (choose *SAP Menu → Business Explorer → Analyzer*).

      Open Business Explorer → Queries

      Place your cursor on your query *AC280 QUERY1 GR##* → and execute it (by choosing *OK*).

   c) As the filter value for your customers, enter the value range 1000 through 2000 (Becker Berlin through Carbor GmbH).

      Select *Customer* and choose *Find Filter Value* from the context menu.

      Selection for customer: *Value Range*

      Place your cursor on the first entry (=Becker). Using the right mouse, choose *Technical Names* from the context menu.

      Double-click *1000* and scroll down through the list until you reach *2000*. Double-click *2000*. Choose *OK*.

   d) Deactivate the interactive functions of your query output.

      With the right mouse, select any cell and choose *Operating Concern → Properties*

Title Element	Field Name	Value
Interaction	Allow Interactive Functions	Empty

      Choose *OK*.

   e) Now test the new setting.

      By way of example, you could try to remove the filter value for the customers. This is no longer possible.

Continued on next page

Re-activate the interactive functions and then remove the filter value for the customers.

With the right mouse, select any cell and choose *Operating Concern → Properties*

Title Element	Field Name	Value
Interaction	Allow Interactive Functions	✓

Choose *OK*.

Select *Customer* with the right-hand mouse and choose *Remove filter value* from the context menu.

2. Add the query you created *AC280 QUERY2 GR##* (## = your group number) to the worksheet alongside query *AC280 QUERY1 GR##* (## = your group number).

Hint: To insert the second query, select a cell in Excel column **F** alongside your query already located in the worksheet (for example, line 1, column F)

Enter customer 1000 to customer 2000 and period 012 in year 2002. As the filter value for your customers for AC280 QUERY1 GR##, enter the value range 1000 through 2000 (Becker Berlin through Carbor GmbH). Remove exception GR##-EXCEPTION from the second query (*AC280 QUERY2 GR##*).

Update (refresh) your second query (AC280 QUERY2 GR##). You are required to enter the value of the variable for period/year. Accept the entries and execute the query again.

Continued on next page

Save the results of the two queries jointly as a new workbook with the description *2 Queries GR##.*

a) *Tools* → *Add Query*

Place the cursor on *AC280 QUERY2 GR##.* Choose *OK*.

Enter customer 1000 to customer 2000 and period 012 in year 2002.

Execute.

b) As the filter value for your customers for AC280 QUERY1 GR##, enter the value range 1000 through 2000 (Becker Berlin through Carbor GmbH).

Select *Customer* and choose *Find Filter Value* from the context menu.

Selection for customer: *Value Range*

Place your cursor on the first entry (=Becker). Using the right mouse, choose *Technical Names* from the context menu.

Double-click *1000* and scroll down through the list until you reach *2000*. Double-click *2000*. Choose *OK*.

Remove exception *GR##-EXCEPTION* from the second query (*AC280 QUERY2 GR##*).

Using the right-hand mouse, select any cell in the operating concern of query *AC280 QUERY2 GR##.* Choose *Exceptions* and then select your exception *GR##-EXCEPTION*. This calls up your exception.

Update (refresh) your second query (AC280 QUERY2 GR##). You are required to enter the value of the variable for period/year. Accept the entries and execute the query again.

Place your cursor on any cell in the operating concern of query *AC280 QUERY2 GR##.*

Choose the *Refresh Query* icon.

Execute

c) Save the results of the two queries jointly as a new workbook with the name *2 Queries GR##.*

Choose the *Save* icon.

Save as a new workbook. Enter *2 Queries GR##* as the description.

Choose *OK*.

3. Now execute your three workbooks consecutively:

• *Result Query 1 GR##*

Continued on next page

- *Result Query 2 GR##* and
- *2 Queries GR##*

a) Choose the *Open* icon and then select and execute the three workbooks mentioned above (by choosing the *OK* pushbutton).

Lesson Summary

You should now be able to:

- Define conditions and exceptions and use them when you display a query
- Tailor certain properties of queries to your requirements
- Add queries to existing workbooks

Unit Summary

You should now be able to:

- Explain the basics of SAP BW architecture
- Gain an overview of the InfoProviders in Financials
- Explain the basics of the InfoCube 0FIAR_C02: FIAR Transaction Data
- Create and change queries
- Explain and use the navigation options provided for query display
- Save query output in a workbook
- Define and use characteristic value and text variables
- Define conditions and exceptions and use them when you display a query
- Tailor certain properties of queries to your requirements
- Add queries to existing workbooks

Unit 6

Appendices

Unit Overview

- Additional Information About Drilldown Reporting
- Menu Paths

Unit Objectives

After completing this unit, you will be able to:

- Describe standard characteristics, key figures, and standard variables, and list transactions used in drilldown reporting
- Find menu paths in the Implementation Guide (IMG)

Unit Contents

Lesson: Appendix

Lesson Overview

- Additional Information About Drilldown Reporting
- Menu Paths

Lesson Objectives

After completing this lesson, you will be able to:

- Describe standard characteristics, key figures, and standard variables, and list transactions used in drilldown reporting
- Find menu paths in the Implementation Guide (IMG)

Business Example

Now that you have looked at drilldown reporting, you want to find out about standard characteristics and key figures, as well as standard variables and transactions.

Additional Information About Drilldown Reporting

Drilldown Reporting in FI: Appendix

- Constants
- Cell Calculation with Constants
- Texts
- GL Drilldown Reporting: Customizing
- GL Drilldown Reporting: Standard characteristics and key figures
- GL Drilldown Reporting: Standard variables
- GL Drilldown Reporting: Transactions
- Drilldown Reporting: FI-GL and FI-SL
- GL Drilldown Reporting: Documentation

- Constants are values that you cannot determine directly from the data in General Ledger Accounting (for example, number of employees or sales area in square meters).
- You can calculate key figures such as *Sales per employee* or *Profit per share*.
- You store constants and their values in the view *V_T060K*.

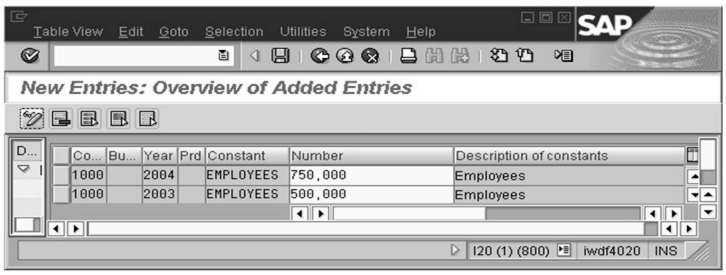

Figure 120: Constants

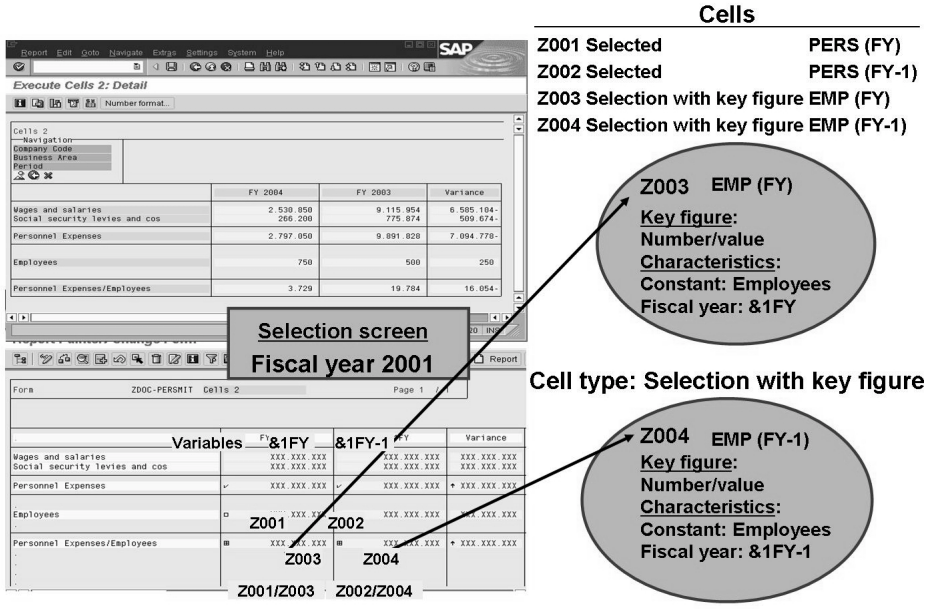

Figure 121: Cell Calculation with Constants

Additional cell types for cell definition:

- **Selection with key figure (value field):**
- Choose *Selection with key figure* (value field) if you want a separate selection at cell level. You then define the cell by selecting a key figure, characteristics and their values, and by specifying a special cell text. This cell definition is visualized by the **squared** character. Note that this special cell does not have to contain the value that would result from the intersection of the row and column selection.
- **Define formula priority:** This option is offered if the column and the row contain formulas. Here you define which of the formulas is to be used to calculate the cell. A result from the column formula means that the formula defined in the column is used. A result from row formula means that the formula defined in the row is used. Cells for which you have to define the formula priority have a red question mark in the form. The selected formula is visualized using an arrow symbol that points to the dimension that has priority (If the column formula has priority, the arrow **points upwards**; if the row formula has priority, the arrow **points left**).

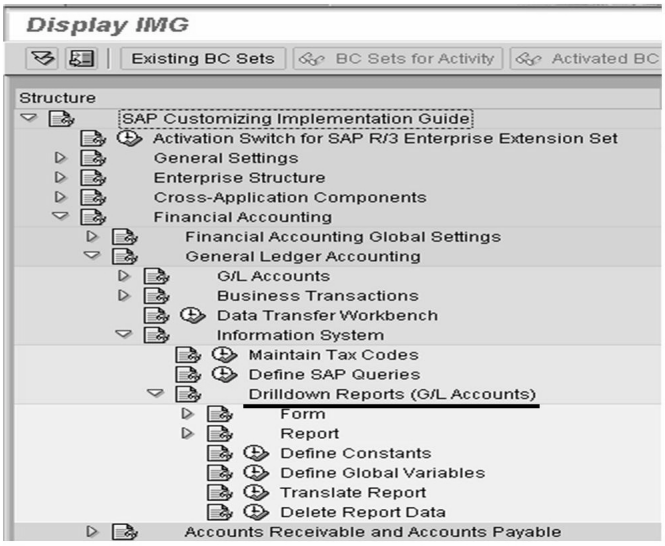

Figure 122: GL Drilldown Reporting: Customizing

- **Characteristics**
  - Chart of accounts
  - G/L account
  - Company code
  - Business area
  - Financial statement version
  - Plan/actual indicator
  - Plan version
  - FS item
  - Fiscal year
  - Period
  - Period/year
- **Key figures**
  - Balance sheet value
  - Number/quantity
  - Balance carryforward
  - Debit total
  - Credit total
  - Cumulative balance

Figure 123: GL Drilldown Reporting: Standard characteristics and key figures

- **Characteristic variables (global)**
  - &1FY - Fiscal year
  - &2FY - Fiscal year (half year)
  - &3FY - Fiscal year (quarter)
  - &4FY - Fiscal year (month)
  - &2PF - Period from (half year)
  - &2PT - Period to (half year)
  - &3PF - Period from (quarter)
  - &3PT - Period to (quarter)
  - &4PE - Period (period evaluation)
  - &5PY - Period/year
- **Text variables (global)**
  - &1FY - Fiscal year
  - &2FY - Fiscal year (half year)
  - &3FY - Fiscal year (quarter)
  - &4FY - Fiscal year (month)
  - &2PF - Period from (half year)
  - &2PT - Period to (half year)
  - &3PF - Period from (quarter)
  - &3PT - Period to (quarter)
  - &4PF - Period from (period evaluation)
  - &4PT - Period to (period evaluation)
  - &5PF - Period/year from
  - &5PT - Period/year to

Figure 124: GL Drilldown Reporting: Standard Variables

- **Transactions**
  - FSI0 Execute report
  - FSI1 Create report
  - FSI2 Change report
  - FSI3 Display report
  - FSIB Background processing
  - FSIO Transport report
  - FSIQ Import report from client 000
  - FSIX Reorganize reports
  - FSIY Reorganize report data
  - FSIT Translation
  - FSI4 Create form
  - FSI5 Change form
  - FSI6 Display form
  - FSIP Transport form
  - FSIR Import form from client 000
  - FSIZ Reorganize forms
  - FSIV Maintain global variables
  - FSIM Report monitor

Figure 125: GL Drilldown Reporting: Transactions

- **Evaluation options**
  - Financial statement (GLT0)
  - Financial statement key figures (GLT0)
  - Balance displays (GLT0)
  - FS analysis from cost of sales ledger (GLFUNCT)
  - Key figures from cost of sales ledger (GLFUNCT)

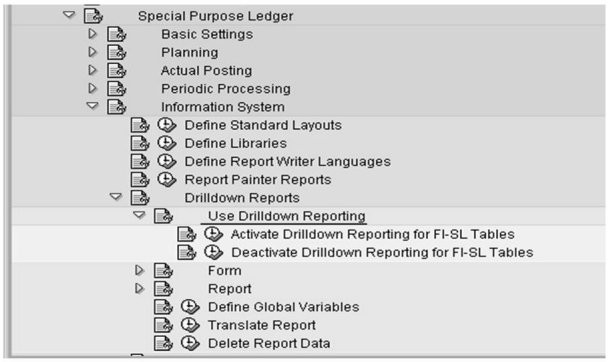

Figure 126: Drilldown Reporting: FI-SL

You can use **drilldown reporting** to evaluate any FI-SL totals tables. You can create and display the following reports:

- Account balances
- Financial statement reports
- Line item reports called up from the totals report
- Flexible reports using SAP account assignments and your own additional account assignments

The evaluation of FI-SL totals tables using drilldown reporting is limited. The following restrictions apply:

- You can evaluate only one ledger.
- You can only report using the second or third currency (usually the local or group currency) and one quantity (no additional quantity).
- You can display only one currency in the report.

Before you evaluate your own FI-SL tables using drilldown reporting, you have to activate the drilldown reporting structure for the relevant FI-SL totals tables. The drilldown reporting field catalog is only updated for the new fields of the totals table.

Documentation:

R/3 Library
>>> Cross-Application Topics
>>> CA - Drilldown Reporting

Figure 127: Drilldown Reporting: Documentation

Menu Paths

Unit: Standard reports in FI-GL, FI-AR, and FI-AP

System → Services → Reporting **SA38**
Goto → Variants
Variant → Create
→ Display
→ Change
→ Copy
Edit → Attributes
Environment → Maintain Selection Variables **STVARV**

SAP Easy Access menu

Accounting
→ Financial Accounting
→ General ledger

→ *information system*

→ *General Ledger Reports (New)*

→ *Financial Statement/Cash Flow*

→ *General*

→ ***Actual/Actual comparisons***

→ ***Plan/Actual comparison***

→ ***Cash Flow***

(...)

→ *Account balances*

→ *General*

→ ***G/L account balances***

(...)

→ ***Structured account balances***

(...)

→ *Line items*

→ *General ledger line items*

→ ***General ledger line items , list for printing***

(...)

→ *Document*

→ *General*

→ ***Document journal***

→ ***Compact document journal***

→ ***Line item journal***

→ ***Display of changed documents***

(…)

→ *Master data*

→ ***Chart of accounts***

→ ***G/L account list***

→ ***Account assignment manual***

→ ***Display changes to G\L accounts***

→ *Accounts Receivable*

→ *information system*

→ *Reports for Accounts Receivable Accounting→ Customers balances*

→ ***Customer balances***

→ ***Customer balances in local currency***

→ ***Customer sales***

(...)

→ *Vendor items*

→ ***Due date analysis for open items***

→ ***List of vendor open items for printing***

→ ***OI - Vendor due date forecast***

→ ***Vendor payment history with OI sorted list***

(...)

→ ***List of vendor cleared items for printing***

→ ***List of down payments open on key date***

→ *Master data*

→ ***Vendor list***

→ ***Address list***

→ ***Display changes to vendors***

→ ***Display/confirm critical vendor changes***

Unit: Reports in user roles	Transaction codes (or transaction SM30, then Table/View)
Menu → Create role	**PFCG**

Unit: List Viewer	Transaction codes (or transaction SM30, then Table/View)
SAPEasy Access Menu	
Accounting	
→ *Financial Accounting*	
→ *General ledger*	
→ *Account*	
✓***Display balances (new)***	**FAGLB03**
✓***Display/change line items***	**FAGLL03**

→ *Accounts receivable*

→ *Account*

✓***Display balances*** **FD10N**

✓***Display/change line items*** **FBL5N**

→ *Accounts payable*

→ *Account*

✓***Display balances*** **FK10N**

✓***Display/change line items*** **FBL1N**

Implementation Guide for R/3 Configuration (IMG)

Financial Accounting

→ *General Ledger Accounting*

→ *G/L accounts*

→ *Line items*

→ *Display Line Items with ALV*

→ ***Define Special Fields for Finding and Sorting Data***

→ *Accounts Receivable and Accounts Payable*

→ *Customer Accounts*

→ *Line items*

→ *Display Line Items*

→ ***Define Additional Fields for Line Item Display***

→ ***Local Reporting for Line Items***

→ ***Maintain Selection Variants for the Display of Customer Line Items***

→ *Vendor Accounts*

→ *Line items*

→ *Display Line Items*

→ ***Define Additional Fields for Line Item Display***

→ ***Local Reporting for Line Items***

→ ***Maintain Selection Variants for the Display of Vendor Line Items***

Unit: Accounts Receivable/Accounts Payable Information System **Transaction codes**

Implementation Guide for R/3 Configuration (IMG) (or transaction SM30, then Table/View)

→ *Financial Accounting*

→ *Accounts Receivable and Accounts Payable*

→ *Information System*

→ *Accounts receivable*

→ *Standard Evaluations*

✓**Copy Standard Evaluations** **FY01**

✓ **Select Standard Evaluations** **OBDF**

✓ **Enhance Standard Evaluations** **CMOD**

→ *Accounts payable*

→ *Standard Evaluations*

✓ **Copy Standard Evaluations** **FY01**

✓ **Select Standard Evaluations** **OBDF**

✓ **Enhance Standard Evaluations** **CMOD**

Application:

SAP Easy Access menu

→ *Accounting*

→ *Financial Accounting*

→ *Accounts receivable*

→ *information system*

→ *Tools*

→ *Configure*

→ ***Specify data volume*** **OBAN**

→ ***Select evaluations*** **OBAJ**

→ ***Create Evaluations*** **F0.29**

→ ***Display evaluations*** **F0.30**

Application:

SAP Easy Access menu

→ *Accounting*

→ *Financial Accounting*

→ *Accounts payable*
→ *information system*
→ *Tools*
→ *Configure*
→ ***Specify data volume*** **OBAO**
→ ***Select evaluations*** **OBAK**
→ ***Create Evaluations*** **F0.45**
→ ***Display evaluations*** **F.46**

Unit: Drilldown Reporting in FI **Transaction codes**

Implementation Guide for R/3 Configuration (IMG)
→ *Financial Accounting*
→ *General Ledger Accounting (new)*
→ *Information System*
→ *Drilldown Reports (G/L Accounts)*
→ *Form*
→ ***Define Form***
✓**Specify form** ✓ **Create Form** **FGI4**
✓**Change Form** **FGI5**
✓**Display Form** **FGI6**
✓**Transport Form** **FGIP**
✓**Import Form from Client 000** **FGIR**
✓**Delete Form** **FGIZ**
→ ***Define Report***
✓**Create report** **FGI1**
✓**Change Report** **FGI2**
✓**Display Report** **FSI3**
✓**Transport Report** **FGIO**
✓**Import Report from Client 000** **FGIQ**
✓**Delete Report** **FGIX**
(...)

→ ***Define Global Variables*** **FGIV**

(...)

→ ***Delete Report Data*** **FGIY**

Transaction codes: Short description

FGI0 Execute report

FGI1 Create report

FGI2 Change report

FGI3 Display report

FGI4 Create form

FGI5 Change form

FGI6 Display form

FGIB Background processing

FGIC Maintain currency translation type

FGIG Characteristic groups

FGIK Maintain key figures

FGIM Report monitor

FGIO Transport report

FGIP Transport form

FGIQ Import reports from client 000

FGIR Import reports from client 000

FGIT Translation tool - drilldown reporting

FGIV Maintain global variables

FGIX Reorganize drilldown reports

FGIY Reorganize report data

FGIZ Reorganize forms

Implementation Guide for R/3 Configuration (IMG)

→ *Financial Accounting*

→ *Accounts Receivable and Accounts Payable*

→ *Information System*

→*Accounts receivable*

→ *Drilldown Reports (Accounts receivable)*

→ *Form*

→ *Define Form*

✓**Create Form** **FDI4**

✓**Change Form** **FDI5**

✓**Display Form** **FDI6**

✓**Transport Form** **FDIP**

✓**Import Form from Client 000** **FDIR**

✓**Delete Form** **FDIZ**

→ *Define Report*

✓**Create Report** **FDI1**

✓**Change Report** **FDI2**

✓**Display Report** **FDI3**

✓**Transport Report** **FDIO**

✓**Import Report from Client 000** **FDIQ**

✓**Delete Report** **FDIX**

(...)

→ *Maintain Global Variables* **FDIV**

(...)

→ *Reorganization of Report Data* **FDIY**

Transaction codes: Short description

FDI0 Execute report

FDI1 Create report

FDI2 Change report

FDI3 Display report

FDI4 Create form

FDI5 Change form

FDI6 Display form

FDIB Background processing

FDIC Maintain currency translation type

FDIK Maintain key figures

FDIM Report monitor

FDIO Transport report

FDIP Transport form

FDIQ Import reports from client 000

FDIR Import forms from client 000

FDIT Translation tool - drilldown reporting

FDIV Maintain global variables

FDIX Reorganize drilldown reports

FDIY Reorganize report data

FDIZ Reorganize forms

Implementation Guide for R/3 Configuration (IMG)

→ *Financial Accounting*

→ *Accounts payable*

→ *Drilldown Reports (Accounts payable)*

→ *Form*

→ ***Define Form***

✓**Create Form**	**FKI4**
✓**Change Form**	**FKI5**
✓**Display Form**	**FKI6**
✓**Transport Form**	**FKIP**
✓**Import Form from Client 000**	**FKIR**
✓**Delete Form**	**FKIZ**
→ ***Define Report***	
✓**Create Report**	**FKI1**
✓**Change Report**	**FKI2**
✓**Display Report**	**FKI3**
✓**Transport Report**	**FKIO**
✓**Import Report from Client 000**	**FKIQ**
✓**Delete Report**	**FKIX**
(...)	
→ *Define Global Variables*	**FKIV**
(...)	
→ *Delete Report Data*	**FKIY**

Trans. code – Short description

FKI0 Execute report

FKI1 Create report

FKI2 Change report

FKI3 Display report

FKI4 Create form

FKI5 Change form

FKI6 Display form

FKIB Background processing

FKIC Maintain currency translation type

FKIK Maintain key figures

FKIM Report monitor

FKIO Transport report

FKIP Transport form

FKIQ Import reports from client 000

FKIR Import forms from client 000

FKIT Translation tool - drilldown reporting

FKIV Maintain global variables

FKIX Reorganize drilldown reports

FKIY Reorganize report data

FKIZ Reorganize forms

Lesson Summary

You should now be able to:

- Describe standard characteristics, key figures, and standard variables, and list transactions used in drilldown reporting
- Find menu paths in the Implementation Guide (IMG)

Unit Summary

You should now be able to:

- Describe standard characteristics, key figures, and standard variables, and list transactions used in drilldown reporting
- Find menu paths in the Implementation Guide (IMG)

Course Summary

You should now be able to:

- Explain why reports are necessary
- Explain the significance of reporting tools
- Differentiate between:
- Standard reports provided by SAP, and
- Reports that you create yourself

Feedback

SAP AG has made every effort in the preparation of this course to ensure the accuracy and completeness of the materials. If you have any corrections or suggestions for improvement, please record them in the appropriate place in the course evaluation.