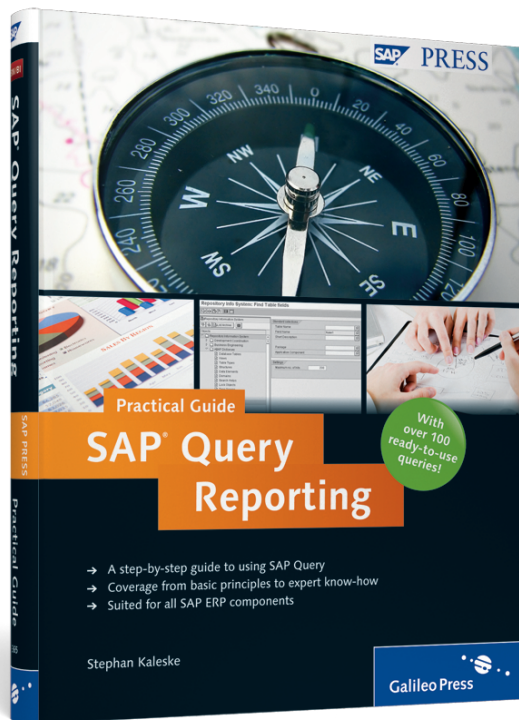


Stephan Kaleske

SAP® Query Reporting—Practical Guide



 Galileo Press®

Bonn • Boston

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SAP Query is used to create analyses in real time without any great effort. Such analyses are used to optimize processes and master data, and to support corporate management. In your SAP ERP system, you can use the SAP Query functions without the need for any additional installations or license fees.

1 Introduction to SAP ERP Reporting

For enterprises, quickly and accurately accessing business information is vital. To this end, SAP provides an extensive portfolio of tools for report creation. The most important tools are as follows:

- ▶ Query reporting tools
- ▶ Report Painter/Report Writer
- ▶ Drilldown Reporting
- ▶ SAP NetWeaver Business Warehouse (SAP NetWeaver BW)/SAP BusinessObjects

The term *query reporting tools* comprises the following tools:

- ▶ SAP Query
- ▶ QuickViewer
- ▶ InfoSet Query

This chapter introduces you to SAP Query, Report Painter, and Drilldown Reporting, and distinguishes among these three tools and SAP NetWeaver BW. In addition, you will learn about frequently used standard SAP reports. After obtaining an overview of the basic requirements for report creation in Section 1.1, ABAP Report Generators, we will compare the three aforementioned query tools in Section 1.2, Query Reporting Tools. Here, you will learn when it is advisable to use the query reporting tools to query information directly in the SAP ERP system. In Section 1.3,

Comparing Analysis Tools: SAP Query and SAP NetWeaver BW, we will highlight the advantages of SAP Query over SAP NetWeaver BW.

If you need reports with summarized figures (totals), which is often the case in Financial Accounting (FI), we recommend that you use the following tools: Report Painter/Report Writer and Drilldown Reporting. In Section 1.4, Cumulated Analyses with Multilevel Hierarchies, you will see how SAP ERP is used in different enterprises with different business requirements. For the most important reporting requirements, which are often the same for many customers, a standard report is frequently available in SAP ERP. Before you create a new report, you should always check whether an existing report already covers your requirements (see Section 1.5, Using Standard Reports).

1.1 ABAP Report Generators

Analyzing requirements

At the start of every report, there is a specific requirements specification. After the data basis has been clarified, the user decides how to format the data and answers the following questions:

- ▶ What does the selection screen look like?
- ▶ Which field contents do you want to output?
- ▶ Which report jumps (drilldown) are useful?
- ▶ How do you want the data to be formatted?
 - ▶ Output length, decimal places, unit
 - ▶ Color display
- ▶ How do you want to summarize or display the data?
 - ▶ Summation levels
 - ▶ Excel display

Business and technical expertise

For example, a developer can use an ABAP report to format the data. However, a good ABAP developer requires time to output structured data. He needs not only technical expertise but also business knowledge, in particular.

Because the business requirements of an enterprise are often challenging, both detailed technical knowledge and industry knowledge are

essential. In addition to technical knowledge, a good consultant, key user, user, or developer must have some business knowledge to create the best analyses.

If you have a good level of technical knowledge, you must acquire the relevant business expertise. Because the analysis requirement is based on many years of real-life experiences, the question of simplified technical analysis options arises. Is it always necessary to create an analysis program from scratch? Are there easy ways to create ABAP code? The goal is to generate a good report and to access a simple report generator, either to accelerate the implementation speed or simply due to a lack of programming knowledge. Table 1.1 provides an overview of the most important report generators for you.

Simplified report creation via the report generator

Report Generator	Transaction	Focus in Real Life
SAP Query	SQ01	All SAP components
SAP NetWeaver BW		All SAP components
Report Painter	FGRP	<ul style="list-style-type: none"> ▶ FI: General ledger, special ledger ▶ CO: Overhead costs, product costs, Profit Center Accounting
Drilldown Reporting		<ul style="list-style-type: none"> ▶ FI: General ledger, customers, vendors, special ledger ▶ CO: Product costs, Profitability Analysis, Profit Center Accounting ▶ TR: Cash Management, Treasury ▶ IM: Investment Management ▶ PS: Project System
LIS		<ul style="list-style-type: none"> ▶ SD: Sales and Distribution, shipping, billing ▶ MM: Purchasing, inventory management, invoice verification ▶ QM: Quality Management ▶ PM: Plant Maintenance ▶ PP: Production Planning and Control

Table 1.1 Overview of the Most Important Report Generators for You

The term “query reporting tools”

SAP provides different utilities for creating ABAP code for an analysis. We already mentioned the most important reporting tools in the introduction, namely Report Painter/Report Writer, Drilldown Reporting, and SAP NetWeaver BW. The Logistics Information System (LIS) is another tool. The term *query reporting tools* is often used in different contexts, both in literature and in real life. Frequently, the term SAP query reporting is also used to describe the SAP NetWeaver BW reporting tools. However, this book concerns only those query reporting tools within the SAP ERP system.

In the next section, we will explain which query reporting tools are available to you.

1.2 Query Reporting Tools

This section provides a first impression of the functional scope of query reporting tools. We will compare the various options and application areas of SAP Query, InfoSet Query, and QuickViewer against each other and explain them in detail.

When we speak of query reporting tools, we mean the following three tools:

- ▶ SAP Query
- ▶ InfoSet Query
- ▶ QuickViewer

Functions of query reporting tools

The order in which these tools are listed reflects their decreasing functional scope. QuickViewer is the easiest tool to use, but it provides the lowest functionality of all three query tools. An overview of the most important functions is provided in Table 1.2.

Development of query reporting tools

In Release 4.6, SAP renamed one of its query reporting tools to SAP Query. Prior to Release 4.6C, it was known as the *ABAP Query Tool*. In the SAP solution portfolio, this tool is still listed under the ABAP development tools because it was originally intended for developers who wanted an easier way to generate ABAP code.

Criterion	SAP Query	InfoSet Query	QuickViewer
Transactions	SQ01, SQ02, SQ03	SQ10	SQVI
Functionality	Calculated additional fields, drilldown	Calculated additional fields, drilldown	–
Output	Basic list, ranked list, statistics	Basic list, ranked list, statistics	Basic list
Table logging	No	Can be activated	No

Table 1.2 Differences Among the Query Reporting Tools

To enable end users to create their own individual reports, InfoSet Query (initially intended for the Human Resources area) and QuickViewer (a particularly easy-to-use tool for occasional users) were developed in Release 4.6C. At the same time, the query tools were completely revised in terms of their performance and the way in which they create ABAP code. The user interface was also simplified.

SAP release changes

In the course of this further development, SAP changed many terms. Table 1.3 provides an overview of these terminology changes.

Terminology changes

Area	Term Before Release 4.6	Term as of Release 4.6
Tool name	ABAP Query	SAP Query
Data pool	Functional areas	InfoSet
Structuring of data	Functional groups	Field groups
Output format	ABAP List Viewer (ALV)	SAP List Viewer (ALV)

Table 1.3 ABAP/SAP Query Terms According to Release

However, all three query reporting tools have the same purpose, namely to create ABAP code easily and thus generate individual analyses.

You can use the following data sources as a data basis for these analyses (see Figure 1.1):

Data sources

- ▶ Individual database table
- ▶ Table join

- ▶ Logical database
- ▶ InfoSet

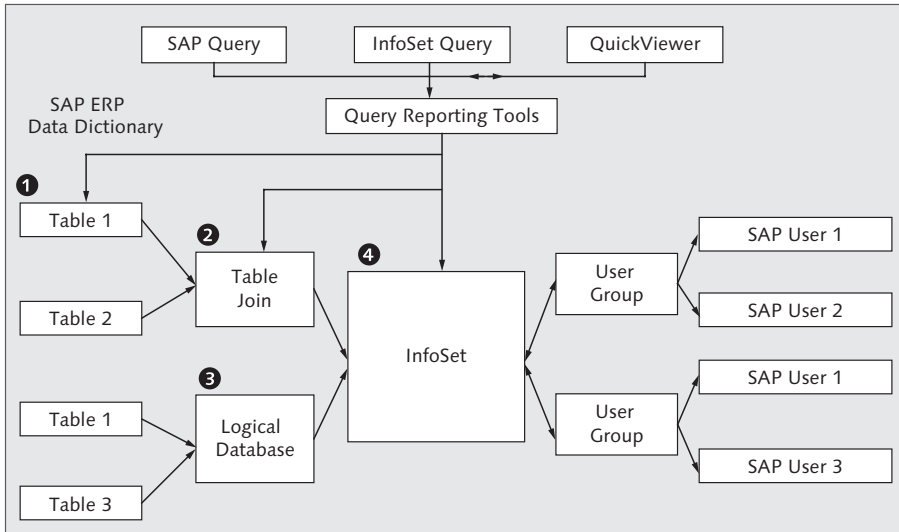


Figure 1.1 Relationships Between SAP Query Functions

Data source: database table In some cases, it is sufficient to query an individual database table (❶). If you have the necessary authorization, you can also use the Data Browser to query the database directly. However, if you want to easily limit access and have a user-friendly query, it may make sense to create a query. It may also be productive to query only one database table (if this table already contains most of the information you require) and to read additional information in separate additional fields.

Data source: table join Due to its simplicity and high implementation speed, QuickViewer has proven successful for one-time ad hoc analyses. In comparison to querying the table directly in the database, you can use QuickViewer to query several tables that are linked via fields. If two or more tables are linked with each other, this is known as a table join (❷).

Logical database Logical databases (❸) contain information that has already been compiled for the creator of the report. Logical databases are the basis for linking SAP tables with each other. Even though a query is easily possible, the

predefined data basis carries the risk of unnecessary data content being queried. Consequently, the simplified query is synonymous with lower performance.

An InfoSet (④) is, for the most part, comparable with a table join. In QuickViewer, a transaction is the basis for defining the table join (data basis) and selecting the selection and layout fields. For SAP Query and InfoSet Query, a separate transaction is used to create the data basis as an InfoSet. An InfoSet can have a table, table join, or logical database as its data basis. InfoSet

QuickViewer is frequently used in real life. A report can be created in just a few minutes, simply by using one transaction (SQVI) and knowing the database table(s). The newly created QuickViewer report is available locally but only to the creator of the report. If another user requires this report, it cannot be simply forwarded to the user. With SAP Query, however, it is possible to convert the new QuickViewer report into an SAP query. For detailed information about QuickViewer, see Chapter 3, QuickViewer. Using QuickViewer

Creating an SAP query is not much more difficult than generating a QuickViewer report. Even though three transactions are used to create a report, report creation is also easy here if you are familiar with the logic. The use of SAP Query is usually preferred over the use of QuickViewer or InfoSet Query because it not only provides more options but also demands a more structured working method. Using SAP Query

SAP Query enables you to specifically format data for individual information objects. In real life, master data is frequently queried using SAP Query. Consequently, numerous analyses exist for the following master data objects, in particular: Master data reports

- ▶ Customers
- ▶ Vendors
- ▶ Materials
- ▶ Conditions
- ▶ Credit limit
- ▶ Work centers

- ▶ General ledger accounts
- ▶ Fixed assets

Displaying data
in an ALV layout
or in Excel

These analyses enable the user to analyze his data individually. In real life, data displayed in an ALV layout or in Microsoft Excel is often received very positively. Because reports are individual, you can easily recognize duplicates or incorrect field content. You can then double-click the report to correct or adjust the data content directly.

Transaction
data reports

With SAP Query, you can also select transaction data according to specific criteria. The status or document flow for orders is queried in this way, and you can specifically optimize the business process on this basis. For example, you can analyze the associated delivery or billing status for a sales order. If the actual status differs from the target status, the relevant departments, customers, or vendors can be informed in good time and specific measures can be taken. In particular, icons (e.g., a red traffic light) are used to highlight critical statuses. The following data objects, in particular, are analyzed in real life:

- ▶ Sales orders
- ▶ Deliveries
- ▶ Billing documents
- ▶ Purchase orders
- ▶ Production orders
- ▶ Open items

Corporate
management

Many enterprises also use SAP Query for corporate management. Many customers require analyses for incoming orders or sales, for example. In addition, many enterprises create stock analyses or target production quantity analyses to display fact-based enterprise results.

Distinguishing
between SAP
Query and SAP
NetWeaver BW

If you have large datasets and complex cross-module analyses, you soon reach the limitations of SAP Query. However, the use of SAP NetWeaver BW is undisputed in such cases. Be that as it may, not all (small and medium-sized) enterprises use a SAP NetWeaver BW system, or they only use some aspects of SAP NetWeaver BW. In the next section, we will discuss the criteria for and against SAP Query (when compared with SAP NetWeaver BW).

1.3 Comparing Analysis Tools: SAP Query and SAP NetWeaver BW

If your enterprise has sufficient resources (time, money, and technical expertise), we recommend using SAP NetWeaver BW or SAP BusinessObjects alongside SAP Query. Examples of SAP BusinessObjects products include Crystal Reports (formatted reporting), Xcelsius Enterprise (dashboarding), and Web Intelligence (ad hoc analysis).

Required resources

Table 1.4 compares and contrasts the most important distinguishing characteristics between SAP Query and SAP NetWeaver BW, especially in terms of the resources used.

Criterion	SAP Query	SAP NetWeaver BW
License fees, interfaces, maintenance, and hardware	Part of the SAP ERP license	Additional license fees frequently necessary (especially if you also want to use SAP BusinessObjects)
Installation	Can be used immediately	Additional installation and hardware frequently necessary
System configuration	Query transactions immediately available	Must be configured independently
Individual real-time analysis	Access to live data with drilldown in real time	Data usually updated in an overnight job

Table 1.4 Comparing Analysis Tools: SAP Query and SAP NetWeaver BW

In terms of resource usage, there are many advantages to using the SAP Query reporting tools:

Advantages of query reporting tools

- ▶ In contrast to SAP NetWeaver BW/SAP BusinessObjects, you can use SAP Query without needing to procure additional licenses.
- ▶ Because report creation via SAP Query occurs directly in the SAP ERP system, no additional maintenance is necessary.

- ▶ The need for a separate system installation or configuration is eliminated as a result of using the query tools directly in the SAP ERP system.
- ▶ You do not have to configure any interfaces or restore them after you perform a system copy.
- ▶ You can already create reports even if you have very little system knowledge. In particular, you require little or no knowledge of ABAP. Even after just a short time, you can create your own queries or analyze existing analyses.
- ▶ The time needed to create reports is comparably low because reports can be created from a single source (business knowledge can be applied directly).
- ▶ Individual information can be queried promptly, and the data already stored in the database is available immediately (in real time). In transactions, you can use a drilldown to navigate directly to the display screen or change screen for data.

Query reporting tools enable SAP users to analyze specific master data objects and process information without the need for a lengthy training phase. As the report recipient/key user, you can create a new report from scratch (on the basis of the data analysis) and only include absolutely necessary information in your reporting environment. You decide which fields you want to output in a list, which selection criteria you will provide, or how you want the data to be formatted.

We recommend using SAP NetWeaver BW to query mass data. If you want to query extensive datasets at a highly aggregated level, it is more productive to use SAP NetWeaver BW because of its runtime. For financial analyses, you can use Report Painter to create aggregated analyses.

1.4 Cumulated Analyses with Multilevel Hierarchies

Analyzing
hierarchy nodes

The purpose of corporate management reports is to analyze data at a summarized level. If you want to obtain an overview of your enterprise's key performance indicators (KPIs), a top-down analysis will accomplish this goal for you. For example, a top hierarchy node is displayed in Cost Center Accounting. This hierarchy node is then gradually expanded in

accordance with the hierarchy levels. If variances arise, the values are initially called for each account and then for each line item. This means that the report user initially obtains the data information at a highly summarized level and can display this data in greater detail, if necessary. In the system, you can maintain hierarchies for many objects. In Financial Accounting (FI), in particular, a good hierarchy structure (summarization of characteristics) can cover many reporting requirements.

1.4.1 Summarization Hierarchies

In the SAP system, separate transactions are used to maintain summarization levels. Depending on the purpose of the report, the information characteristics (e.g., cost centers) must be summarized in accordance with different criteria. For example, an enterprise summarizes its cost center information in accordance with its responsibilities on one hand and in accordance with functional viewpoints on the other. Different time-based groupings are also required. For the current fiscal year, actual values must be queried in accordance with the first grouping while, for the subsequent year, planned values must be queried in accordance with the second grouping.

Summarization criteria

To fulfill your analysis requirements, the SAP software enables you to group master data objects at multiple levels and in accordance with different criteria. In the SAP system, a hierarchy (also technically known as a set) is used to group master data. Table 1.5 lists the most important transactions for summarizing master data.

Master data hierarchies

Master Record	Create	Change	Display
Financial statement version	OB58	FSE2	FSE3
Cost elements	KA01	KA02	KA03
Standard cost centers	–	OKEON	OKENN
Alternative cost centers	KS02	KS02	KS03
Statistical key figures	KK01	KK02	KK03
Activity types	KL01	KL02	KL03
Internal orders	KO01	KO02	KO03

Table 1.5 Transactions for Master Data Hierarchies

Master Record	Create	Change	Display
Standard profit center	KCH1	KCH5N	KCH6N
Alternative profit center	KCH1	KCH2	KCH5
CO-PA characteristics	KES1	KES2	KES3
Sets, general	GS01	GS02	GS03

Table 1.5 Transactions for Master Data Hierarchies (Cont.)

Querying hierarchy nodes in the query

In the context of queries, you can also query the information in master data hierarchies. For example, when analyzing work centers, you can display the assigned cost center. In the query, you can then determine the associated cost center node on the basis of the cost center. You can query a summarization level in SAP Query. If you want to display the information characteristics at multiple levels, Report Painter and Drilldown Reporting report tools will usually accomplish this goal for you.

1.4.2 Report Painter

Database tables

Report Painter accesses database tables in the same way SAP Query does. Because Report Painter is usually used in real life, we will not discuss Report Writer. Report Writer — considered by most users to be too technical — can be regarded as a precursor to Report Painter. Almost all of the Report Writer functions have been incorporated into Report Painter. Because there are still some minor functional differences between the two tools, and some of the Report Writer reports delivered by SAP still exist, both tools continue to coexist in the system.

Reporting tables

The most important related database tables are grouped together to form reporting tables. Reporting tables are predefined and comprise a certain number of characteristics and key figures. The relationships between the database tables, the reporting tables, and the characteristics and key figures are shown in Figure 1.2.

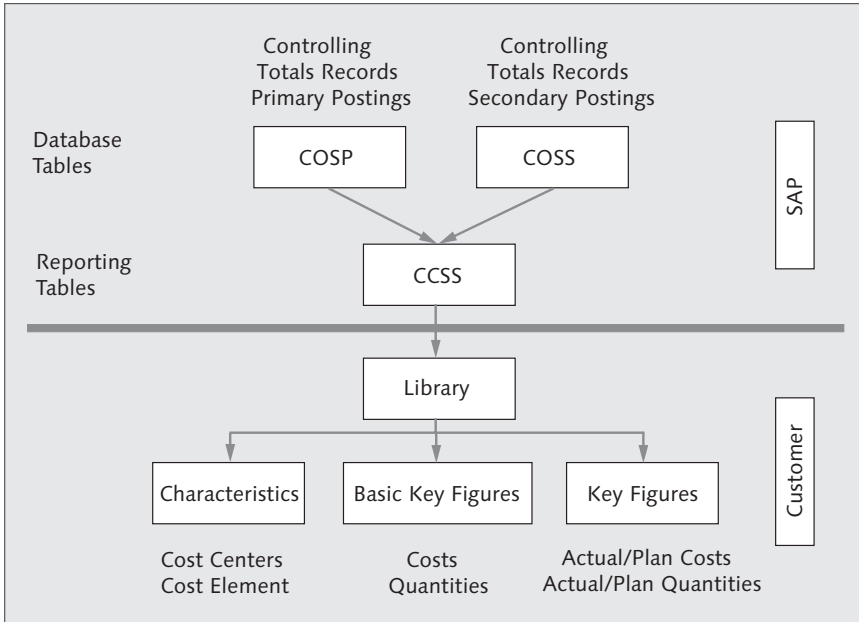


Figure 1.2 Relationships Among Database Tables, Reporting Tables, and Report Painter Libraries

SAP has defined database tables and reporting tables. Approximately 60 reporting tables are delivered in the standard SAP ERP system. You can structure the contents of the reporting tables in libraries. A library represents a selection of characteristics and key figures associated with a particular reporting table. Therefore, please check whether the reporting tables delivered by SAP contain the analysis characteristics and key figures you require.

Libraries

Report Painter is particularly suitable for the following areas:

Areas in which Report Painter can be used

- ▶ Cost Center Accounting
- ▶ Internal orders
- ▶ Analyses in accordance with cost of sales accounting
- ▶ Profit Center Accounting
- ▶ Reconciliation ledgers (if the new general ledger is not used)
- ▶ Special ledgers

- ▶ General ledger
- ▶ Project System (PS)
- ▶ Product Cost Planning

You should examine the use of Report Painter in these areas. The following two examples demonstrate the advantages associated with using Report Painter in this context.

Example 1:
Controlling report

Figure 1.3 shows the first example, namely a controlling report. The controlling report analyzes account groups in individual rows. In a master data hierarchy, individual accounts are grouped together. Planned, actual, and variance costs are displayed in the columns. In addition, key figures are calculated in the lower section of the report. As in Excel, specific column and row positions are used as a basis. Report Painter is an excellent reporting instrument in Overhead Cost Controlling and Profit Center Accounting, in particular.

ZLex1610: Tool cost 18.07.2010

Profit Center/Group
9 2009

Cost according Finance in USD	Plan 9	Act. 9	Var. abs.	Var. %	Plan 1-9	Act. 1-9	Var. abs.	Var. %
Tool cost		35	35	100,00		114	114	100,00
Tool making		4	4	100,00		14	14	100,00
Repair / Maintenance						5	5	100,00
± Sum Tool cost		40	40	100,00		134	134	100,00
± Result Production department before IC		1.640-	1.640-	100,00		4.564-	4.564-	100,00
Intercompany movements						1	1	100,00
** Result Production department after IC		1.640-	1.640-	100,00		4.563-	4.563-	100,00

Key figure block001	Plan 9	Ist 9	Abw abs	Plan 1-9	Ist1-9	Abw abs
Werkzeugverbrauch/Wertschöpfung in %		2,16-	2,16-		2,50-	2,50
Werkzeuggenerierung/Wertschöpfung in %		0,26-	0,26-		0,31-	0,31
Instandhaltung Masch./Wertschöpf. in %					0,12-	0,12
Gesamtanteil an Wertsschöpfung in %		2,42-	2,42-		2,93-	2,93

Figure 1.3 Example of a Controlling Report in Report Painter

You can also create very good analyses in FI. In real life, Report Painter is very often used to create a provisions report. Figure 1.4 shows you the creation screen for a Report Painter report.

Example 2:
Provisions report

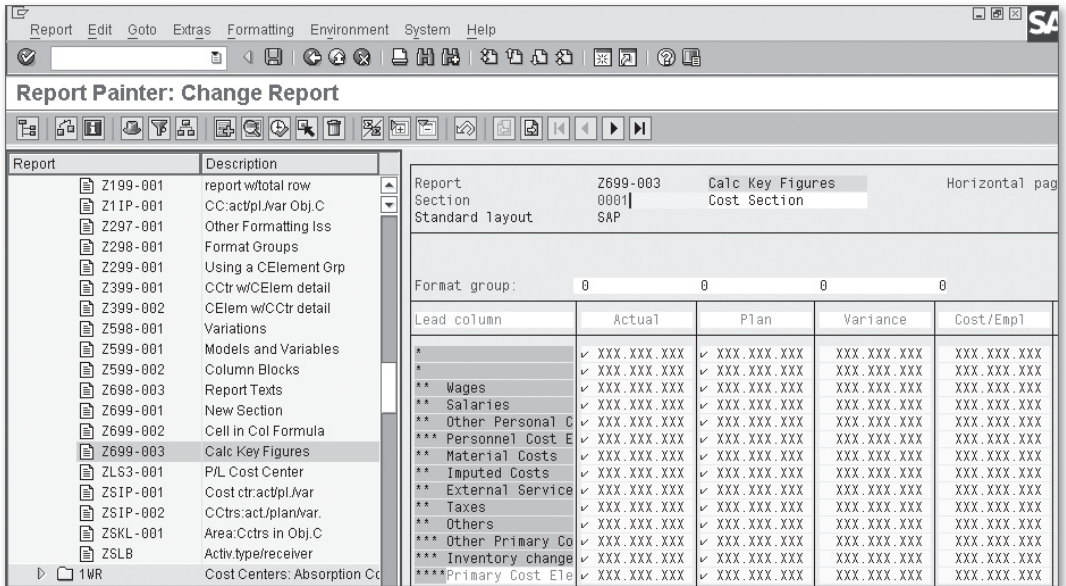


Figure 1.4 Example of a Provisions Report in Report Painter

The different applications are displayed on the left-hand side of the screen as libraries. You now obtain a report generator as an Excel display. By double-clicking the rows and columns, you can use the contents you require. The two axes are displayed in the original report display accordingly. This display is also known as WYSIWYG (What You See Is What You Get).

The Report Painter interface is comparable with an Excel spreadsheet. Consequently, planned or actual values for each period or fiscal year are usually displayed in the columns. In the rows, the data is displayed in accordance with an expandable summarization group (e.g., a cost element); in other words, the report structure is fixed in terms of the columns and rows displayed. If you now want to analyze other char-

Characteristics and key figures

acteristics or key figures in the rows or columns, you must adjust the report accordingly.

Distinguishing between Report Painter and Drill-down Reporting

The Drilldown Reporting tool affords you the flexibility to change the characteristics in the report display. This tool has many interactive functions, which we will describe in the next section.

1.4.3 Drilldown Reporting

Drilldown Reporting provides you with an interactive analysis of your cumulated data. The Drilldown Reporting function is used in FI, in particular. Table 1.6 shows the most important transactions for report creation.

Master Record	Report Overview	Create Form	Change Form	Display Form	Create Report	Change Report	Display Report
GL accounts New GL	FGI0	FGI4	FGI5	FGI6	FGI1	FGI2	FGI3
GL accounts Classic GL	FSI0	FSI4	FSI5	FSI6	FSI1	FSI2	FSI3
Customers	FDI0	FDI4	FDI5	FDI6	FDI1	FDI2	FDI3
Vendors	FKI0	FKI4	FKI5	FKI6	FKI1	FKI2	FKI3
Profit centers	KE80	KE81	KE82	KE83	KE84	KE85	KE86
Projects	CJE0	CJE1	CJE2	CJE3	CJE4	CJE5	CJE6
CO-PA totals records	KE30	KE34	KE35	KE36	KE31	KE32	KE33
CO-PA line items	KE30	KE94	KE95	KE96	KE91	KE32	KE33

Table 1.6 Transactions for Creating Reports in Drilldown Reporting

Example: Key figure reports

You can use the Drilldown Reporting tool to create key figure reports, in particular. For example, you can create valuable key figure reports in Profitability Analysis (CO-PA) and Financial Accounting (FI). An example of a key figure report is shown in Figure 1.5.

Formular ZLEX99SAVE ZLex Group ReportBlatt 1 / 1								
	IST &3FY	in %	IST &3FY	in %	IST &1FY	in %	IST LJ	PLAN &1FY
	1 - &1PT		1 - 12		1 - &1PT		&3FY 1 - 12	1 - &1PT
KEY FIGURES								
Liquidity								
Cash Ratio 1 (Cash/Sh-t liab. > 20-30)	0	+xxx,xx	0	+xxx,xx	0	0	0	0
Quick Ratio (Cash+Rec./Sh-t liab. > 100)	0	+xxx,xx	0	+xxx,xx	0	0	0	0
Current Ratio (Cu.Ass./Sh-t liab. > 200)	0	0	0	0	0	0	0	0
Intensity of Cash (Cash/Assets)	0	0	0	0	0	0	0	0
Assets & Liabilities								
Intensity of Stock (Stock/Assets)	0	0	0	0	0	0	0	0
Stock turnover (months)	0	0	0	0	0	0	0	0
Receiv. turnover Third Party (months)	0	0	0	0	0	0	0	0
Receiv. turnover Intercompany (months)	0	0	0	0	0	0	0	0
Receiv. turnover Total (months)	0	0	0	0	0	0	0	0
Payables turnover Total (months)	0	0	0	0	0	0	0	0
Gross turnover / current assets	0	0	0	0	0	0	0	0
Gross turnover / current assets in days	0	0	0	0	0	0	0	0
IC Loans to Equity (Thin capital. Rule)	0	0	0	0	0	0	0	0
Profitability								
Salary Costs to Gross Margin on Sales	0	0	0	0	0	0	0	0
Gross Margin on Net Sales	0	0	0	0	0	0	0	0
EBITAD Margin (EBITAD/Net Sales)	0	0	0	0	0	0	0	0
EBIT Margin (EBIT/Net Sales)	0	0	0	0	0	0	0	0
Income Margin (Result b. tax/Net Sal.)	0	0	0	0	0	0	0	0
Earnings Margin (Result a. tax/Net Sal.)	0	0	0	0	0	0	0	0
Covenants								
Equity Ratio (Equity/Liabilities)	0	0	0	0	0	0	0	0
Interest Coverage Ratio (EBIT/Int. Res.)	0	0	0	0	0	0	0	0
Borrowing Ratio (EBITAD/Bank Debts)	0	0	0	0	0	0	0	0

Figure 1.5 Drilldown Reporting — Key Figure Report

When creating a Drilldown Reporting report, you must first define a form that will contain field contents at field level. As in Excel, a field can represent row 3, column 4, for example. In real life, key figures such as EBIT (Earnings Before Interest and Tax) are determined **(1)**.

Form in Drilldown Reporting report

The most important part of a Drilldown Reporting report is the creation of the report form. You can also use Report Painter technology to create the form. You therefore require very little additional knowledge to create your own Drilldown Reporting report.

SAP delivers numerous reports in the standard system. For each application area, there is one central transaction with which you can execute Drilldown Reporting reports:

Drilldown Reporting reports in the standard system

- ▶ FG10 — New General Ledger (New GL)
- ▶ FS10 — Classic General Ledger
- ▶ FD10 — Accounts Receivable Accounting

- ▶ FK10 — Accounts Payable Accounting
- ▶ KE80 — Profit Center
- ▶ KE30 — CO-PA (Totals Item and Line Item Reports)
- ▶ CJEO — Project Reports



Using Report Templates

Before you create a new report, take a look at the previously mentioned transactions to see if the report you require already exists. Frequently, it is useful to use an existing report as a template for a new report.

Figure 1.6 shows various balance sheet reports with different time periods for the classic general ledger.

Report	Description	User n
Report type		
001	Financial Statement Analysis	
0SAPBLNCE - 01	Actual/Actual Comparison for Year	SAP
0SAPBLNCE - 02	Half-Year Actual/Actual Comparison	SAP
0SAPBLNCE - 03	Quarterly Actual/Actual Comparison	SAP
0SAPBLNCE - 04	Periodic Actual/Actual Comparison	SAP
0SAPBLNCE - 10	10-Year Actual/Actual Comparison	SAP
1SAPBLNCE - 01	Annual Plan/Actual Comparison	SAP
1SAPBLNCE - 02	Half-Year Plan/Actual Comparison	SAP
1SAPBLNCE - 03	Quarterly Plan/Actual Comparison	SAP
1SAPBLNCE - 04	Periodic Plan/Actual Comparison	SAP
002	Financial Statement Key Figures	
003	Balance display	
004	Financial statements analysis from...	
005	Key figures for cost of sales ledger	

Figure 1.6 Extract of a Standard SAP Report in the Classic General Ledger

Cash flow reports Predefined key figure reports are delivered in addition to the various reports for financial statement analysis. Four sample reports for displaying the cash flow are available, for example. One advantage of the Drilldown Reporting tool is the flexible selection of analysis characteristics. Open customer items were analyzed in Figure 1.7.

Here, you will see the four areas of the Drilldown Reporting tool:

The navigation bar (1) contains various characteristics for a specific data selection. In our example, open items were selected for Austria. The PERIOD/YEAR characteristic was then selected. Navigation bar

In the lower-left screen area (2), you can define predefined key figures. In our example, the debit/credit amount is shown. Key figures

The selected data is also displayed in the breakdown (3). In our example, you see when the open items for Austria fall due. You could now use drag and drop to further analyze these values (e.g., in accordance with the CUSTOMER criterion). Breakdown

Area (4) is a graphical representation of the data that you have selected. Graphic

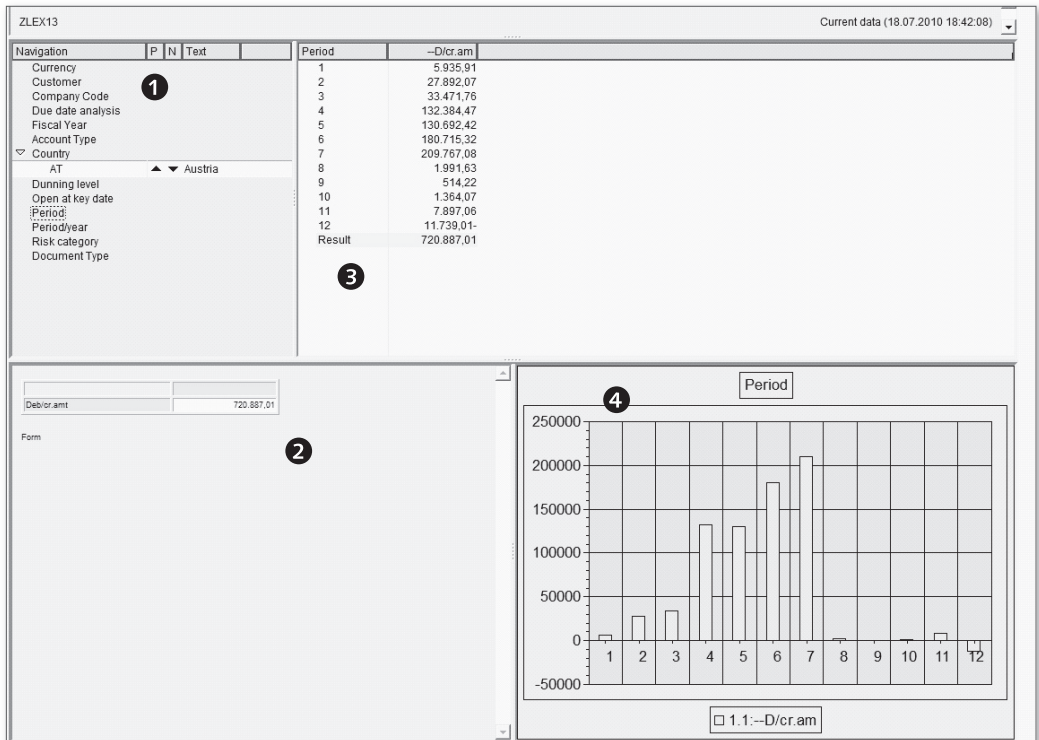


Figure 1.7 Example of a Drilldown Reporting Report for the Analysis of Open Customer Items

In summary, Report Painter and Drilldown Reporting are excellent tools for creating reports in FI. These tools are also considerably faster than using SAP Query or standard SAP transactions for a summarized display of single records, especially when you want to display cumulated data and use multilevel hierarchies.

In addition to the summary reports shown in this section, SAP ERP has numerous excellent standard reports. In the next section, we will introduce you to a selection of these reports.

1.5 Using Standard Reports

Not every analysis is customer-specific, and it is not always necessary to create a new (query) report. In the standard system, there are many good predefined analyses that provide the information you require. This section shows how you can find standard analyses in the system. Before you create a new report, you should check whether the report you need already exists in the standard system. The most important reports for real-life scenarios are also listed.

1.5.1 SAP Area Menus

One way to identify standard reports is to use area menus. Area menus are menu trees that are predefined by SAP and contain the most important transactions for certain areas of application. There are approximately 1,500 area menus. You can call the area menus by entering a transaction code in the command field.

Sales and
Distribution area
menu (Transaction
SD01)

In the command field, enter Transaction SD01 for the Sales and Distribution area menu (see Figure 1.8).

Instead of the entire SAP menu, your initial screen displays the most important transactions in the Sales and Distribution menu. Under the SALES • QUOTATIONS menu path, you find six different transactions for analyzing quotations.

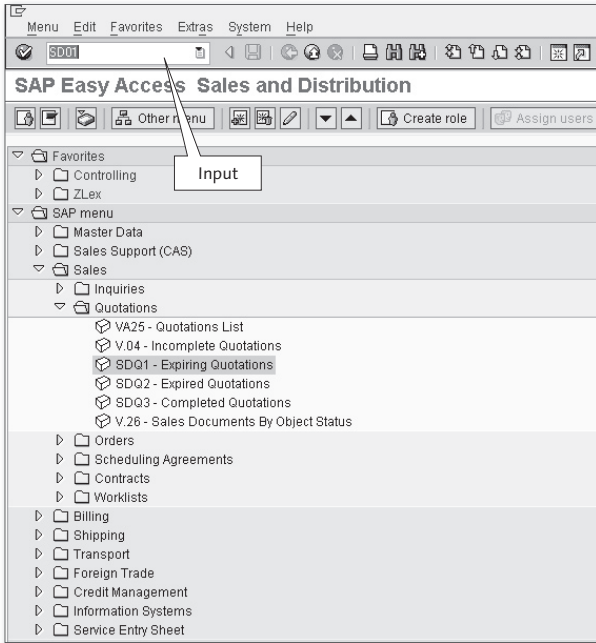


Figure 1.8 Calling the Sales and Distribution Area Menu

You can use Transaction SE43 (Area Menu) to find the SAP area menu. Enter Transaction SE43 in the command field to display the AREA MENU MAINTENANCE screen (Figure 1.9).

Area menu maintenance (Transaction SE43)

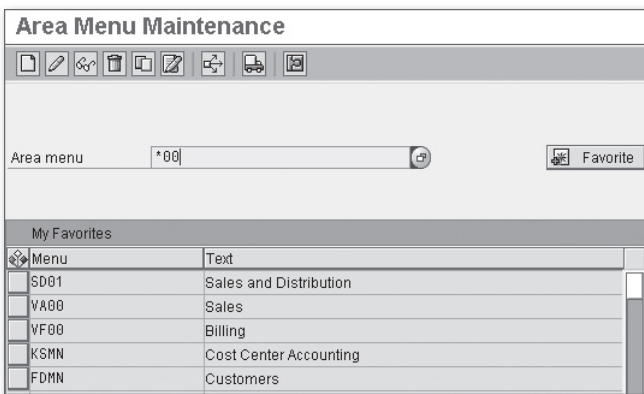


Figure 1.9 Displaying Area Menus in Transaction SE43

Matchcode
(Transaction SE41)

Here, you can use the matchcode **F4** to select the relevant menu for you. You either search through all 1,500 area menus (approximately), or you use the explanatory text to restrict the number of menus. For example, you could use the text "Sales" to find an area menu. Because many important area menus have the ending MN or 00, you could perform a *MN or *00 search in the area menu. By entering an asterisk before the two zeros, you get all area menus that end with MN or 00. Call the matchcode **F4** in Transaction SE41, and enter your restriction (see Figure 1.10).

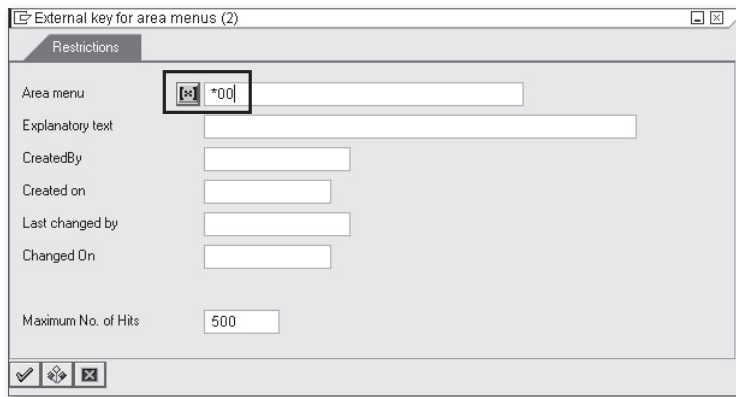


Figure 1.10 Looking for an Area Menu

You obtain approximately 125 different area menus in your search result. The actual transactions are listed on the left-hand side of the result. For example, your search result contains Transaction VA00 for the SALES area menu (see Figure 1.11).

Sales area menu
(Transaction VA00)

If you now enter Transaction VA00 in the command field, a menu branch containing the relevant transactions from the Sales area is displayed. Expand the INFORMATION SYSTEM • QUOTATIONS path in the menu branch, and the system displays six transactions for analyzing quotations.

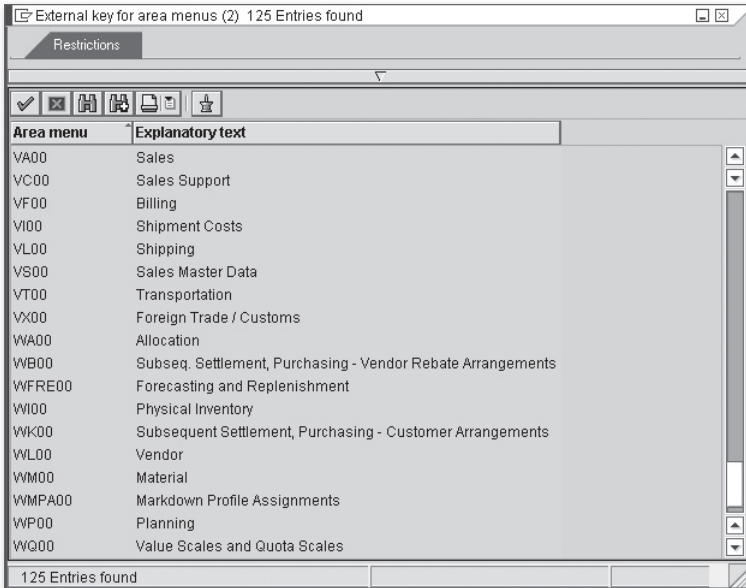


Figure 1.11 Displaying Area Menus Ending with 00

1.5.2 Finding a Report in the SAP Menu

You can also find standard reports by searching the entire SAP menu for a term. To do this, enter Transaction SEARCH_SAP_MENU in the command field (as shown in Figure 1.12).

Transaction
SEARCH_SAP_
MENU

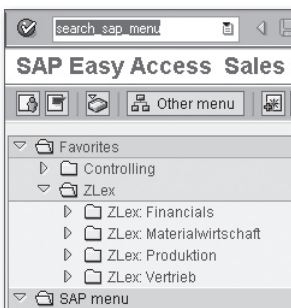


Figure 1.12 Entering "search_sap_menu" in the Command Field

After you have entered the command "search_sap_menu" or pressed the key combination **Ctrl** + **F**, the system displays the SEARCH IN MENU

Finding
transactions

TREE dialog box. You can enter any term here. You can also use an * as a wildcard. For example, if you search for "Customer master*", the transaction for calling the customer master record is displayed. Alternatively, enter the term "Quotations" in the FIND field (see Figure 1.13).

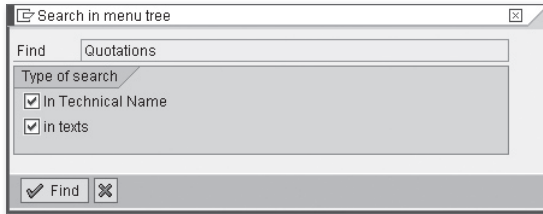


Figure 1.13 Entering the Search Term "Quotations" in Transaction "search_sap_menu"

After you have chosen the button with the green checkmark to confirm the search term "Quotations", the system displays the relevant menu paths on the next screen. You now have an accurate overview of the menu item that contains the transactions for analyzing quotations (see Figure 1.14).

Search for a Transaction Code or Menu Title		
Node	Transaction code	Text
Nodes	V.04	Display Incomplete Quotations
Preceding node		Inquiry and Quotation
Preceding node		Service Agreements
Preceding node		Report Selection
Preceding node		Information System
Preceding node		Equipment and Tools Management
Nodes	SDQ1	Logistics
Preceding node		Expiring Quotations
Preceding node		Inquiry and Quotation
Preceding node		Service Agreements
Preceding node		Report Selection
Preceding node		Information System
Nodes	SDQ2	Equipment and Tools Management
Preceding node		Logistics
Preceding node		Expired Quotations
Preceding node		Inquiry and Quotation
Preceding node		Service Agreements
Preceding node		Report Selection
Nodes	SDQ2	Information System
Preceding node		Equipment and Tools Management
Preceding node		Logistics
Preceding node		Expired Quotations
Preceding node		Inquiry and Quotation
Preceding node		Service Agreements

Figure 1.14 Search Result for the Term "Quotations" in the SAP Menu

In this way, you find the same transactions as the ones you found when searching the area menu. However, because menu branches are displayed when you search the SAP menu, we generally recommend that you search the SAP menu directly.

1.5.3 Searching the Menu for Standard Reports

You can perform a search directly in the actual application for which you require an analysis. In the standard SAP menu, select the following menu branch, for example: LOGISTICS • SALES AND DISTRIBUTION • SALES • INFORMATION SYSTEM • QUOTATIONS. After you have expanded the QUOTATIONS menu item, you find six transactions for analyzing quotations (see Figure 1.15).

Searching an SAP component

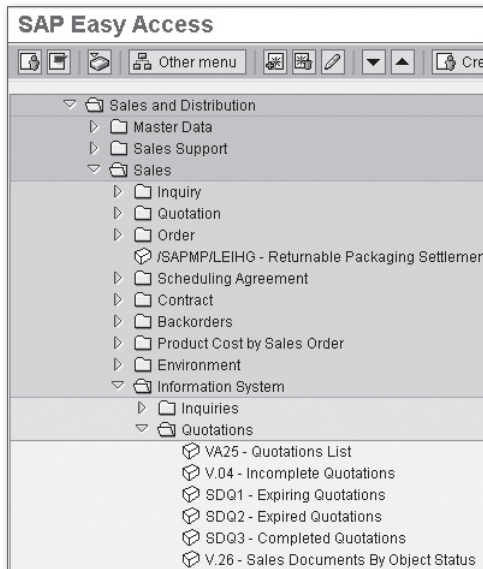


Figure 1.15 Searching the SAP Menu for Transactions for Analyzing Quotations

In addition to searching the information system for the relevant application, you can also search the INFORMATION SYSTEMS menu item. As well as the application components from the LOGISTICS, ACCOUNTING, and HUMAN RESOURCES areas, a cross-application menu branch with analyses is also available (see Figure 1.16).

“Information Systems” menu item

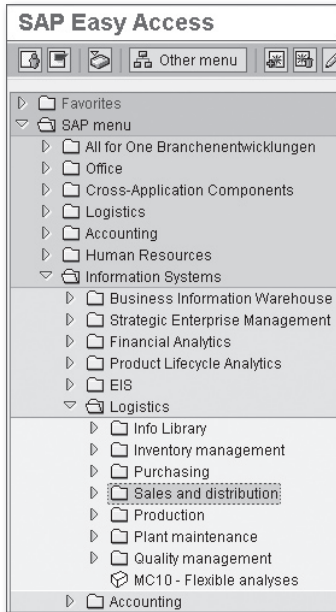


Figure 1.16 Standard SAP Menu: Information Systems

In addition to the reports available under INFORMATION SYSTEMS, SAP has created additional transactions that are not yet available in the standard menu. We will introduce you to these transactions in the next section.

1.5.4 Important Standard Transactions

On feedback from its customers, SAP has revised many transactions and equipped them with improved functions. However, existing transactions have not been changed. Instead, they coexist with the newly revised transactions, which have the suffix N.

List of Quotations
(Transaction VA25
and VA25N)

For example, Transaction VA25N is now available in addition to the former Transaction VA25 for querying quotations (List of Quotations).

Transaction VA25 has six selection fields (see Figure 1.17). However, the new transaction (VA25N) is considerably more flexible because its new selection screen contains the new and improved functions for analyzing quotations (see Figure 1.18). Additional display functions are available for the report, which now has a modernized layout. Furthermore, you can display and change quotations directly.

List of Quotations			
	Disp.variants	Further sel.criteria	Organizational data
Sold-to party <input type="text"/>			
Material <input type="text"/>			
Valid from	<input type="text" value="14.07.2010"/>	To	<input type="text" value="13.08.2010"/>
Quotation data			
Document Date	<input type="text"/>	to	<input type="text"/>
Selection criteria			
<input checked="" type="radio"/> Open quotations <input type="checkbox"/> My quotations			
<input type="radio"/> All quotations			

Figure 1.17 Transaction VA25 – List of Quotations

List of Quotations			
Docum.Data			
Document Number	<input type="text"/>	to	<input type="text"/>
Sales Document Type	<input type="text"/>	to	<input type="text"/>
Sold-To Party	<input type="text"/>	to	<input type="text"/>
Document Date	<input type="text"/>	to	<input type="text"/>
Material	<input type="text"/>	to	<input type="text"/>
Valid From	<input type="text"/>	to	<input type="text"/>
Purchase Order Number	<input type="text"/>		
Persons Responsible			
Partner Functions Responsible	<input type="text"/>		
Personnel Number Responsible	<input type="text"/>	to	<input type="text"/>
Created By	<input type="text"/>	to	<input type="text"/>
Organizat. data			
Sales Organization	<input type="text"/>	to	<input type="text"/>
Distribution Channel	<input type="text"/>	to	<input type="text"/>
Division	<input type="text"/>	to	<input type="text"/>
Sales Office	<input type="text"/>	to	<input type="text"/>
Sales Group	<input type="text"/>	to	<input type="text"/>
Selection Crit.			
<input type="radio"/> Open Quotations <input checked="" type="radio"/> All Quotations			

Figure 1.18 Transaction VA25N – List of Quotations

Table 1.7 contains a selection of transactions that are not available in the SAP menu.

Application	Transaction	Description
Sales and Distribution	VA05N	List of Sales Orders
Sales and Distribution	VA15N	List of Inquiries
Sales and Distribution	VA25N	List of Quotations
Sales and Distribution	VA35N	List of Scheduling Agreements
Sales and Distribution	VA45N	List of Contracts
Sales and Distribution	VF05N	List of Billing Documents
Purchasing	ME80AN	General Analyses (Inquiry)
Purchasing	ME80FN	General Analyses (Purchase Order)
Purchasing	ME80RN	General Analyses (Contract, Scheduling Agreement)
Purchasing	ME81N	Analysis of Purchase Order Values

Table 1.7 Transactions with Extensive Options

The new transactions provide highly flexible options. In the Purchasing transactions, for example, you can navigate directly to the purchasing documents (e.g., purchase order) or the material master. In the purchasing analyses, you can also display the purchase schedule lines and purchase order history.

1.6 Summary

In SAP ERP, SAP provides the following three query reporting tools for data queries: SAP Query, InfoSet Query, and QuickViewer. You can use these tools immediately in the SAP ERP system without any extensive training or additional costs for online data queries.

When analyzing mass data and highly summarized financial key figures, we recommend that you use SAP NetWeaver BW or Report Painter. The Report Painter technology is also used in the Drilldown Reporting tool. In addition, the standard system already contains numerous analyses.

In real life, there are numerous application scenarios in which SAP Query has advantages over SAP NetWeaver BW and Report Painter. In query reporting, it is important to find the correct table with the relevant data content. We will therefore explain how to find the relevant tables in the next chapter, Overview of SAP Tables and Table Links.

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