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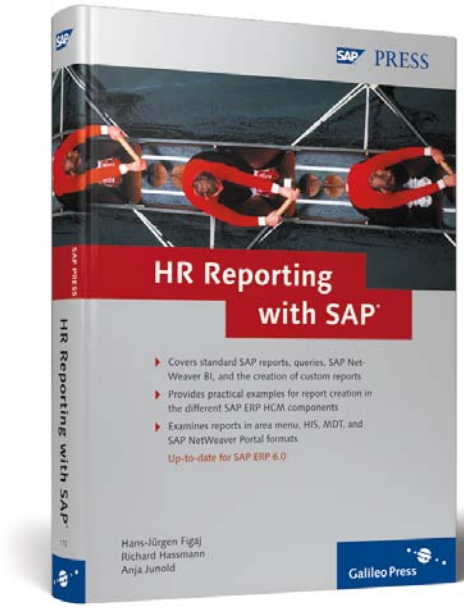
HR Reporting with SAP®



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Contents at a Glance

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PART II Reporting Tools

Before running a report, you first have to examine the data that you intend to use as a basis for the report. Among the things you need to look at are the data's technical structure and content. The latter has to contain information that is relevant to the purpose of the report. We explain these basic topics in this chapter.

2 Basics of Reporting in SAP ERP HCM

Data structures in SAP ERP HCM

SAP ERP HCM contains many different data structures. These data structures can be divided into three areas:

- Personnel administration master data
- Payroll and time management results data
- Personnel planning data

The structures of the data in each of these areas are fundamentally different.

[+]

The structure of applicant management data is identical to that of personnel administration data, so we mention it here only when we want to draw your attention to something in particular.

Personnel administration master data is the basis of all SAP ERP HCM modules. When an employee's data is entered in the system, the data is stored in what are known as *infotypes*. Once the employee is "created" in this way, the data can then be used in other modules. The payroll and time management areas, for example, use this data and store their results in *data clusters*. The structure of these data clusters consists of several related tables that are different for each application. Personnel planning data consists of a wide variety of objects that are related to each other by means of links. The individual properties of these objects are also stored in *infotypes*. Section 2.1 deals with these data structures in more detail.

Logical database

The fundamental technology provided by SAP for reporting on these structures is the *logical database*. Almost every report is based on the functionalities of a logical database, which retrieves data for reporting purposes from any infotype you want. The logical database presents you with a selection screen for the settings and carries out the standard authorization checks without system downtime. From the user's viewpoint, there is a single, unified interface for dealing with all kinds of reports. Section 2.2 contains information about the logical databases that are available in the HCM system.

Authorization concept

HR data is particularly sensitive, which creates considerable demands of the authorization concept. See Section 2.4 for important information on the authorizations required in the HR reporting area.

Reporting basics

Even the best report cannot compensate for inadequate data quality and missing information. Section 2.5 of this chapter describes the most important things you need to know to create a good basis for your reports.

2.1 Data Structures in SAP ERP HCM

In this section, we introduce the three data structures of the HCM system that we mentioned above: payroll and time management data clusters, the employee master data (personnel administration) infotypes, and the personnel planning infotypes. Because these infotypes have different structures and uses, we will look at them separately.

2.1.1 Personnel Administration Infotypes

Interrelated content is stored in infotypes in SAP ERP HCM. The division of data into infotypes is based mainly on business criteria. This concept enables you to decide freely which infotypes to use and not use. However, certain infotypes, such as IT0002 (Personal Data), are mandatory, as some basic functions would not be possible without them. The decision about which of the different infotypes to use depends on which processes you intend to use. Another option is to use data fields within an infotype. In this case, as before, there are differences: Certain fields are mandatory, whereas others can be used or hidden, as you require.

[Ex]

The Personal Data infotype (see Figure 2.1) contains the personal details of the person in question, divided into the blocks *Name*, *Birth data*, and *Marital status/religion*. This infotype is clearly one of the mandatory ones (without a person's name, for example, most reports would be useless). Examples of optional infotypes are IT0040 (Objects on Loan) and IT0035 (Company Instructions).

Only a few fields in Personal Data are not mandatory, such as the fields under *Marital status/religion*; you use these only if you choose to.

[!]

The example above illustrates the disadvantage of the infotype concept: some data applies to multiple infotypes. For example, data on marital status and religion is also relevant for taxation purposes (in Germany), so the *Number of children* (*No. child*.) and *Religion* fields are also included in the infotype IT0012 (tax data D). Therefore, as you can see, data redundancy exists in the system. There are only a few cross-infotype checks, and you have to program these yourself in user exits.

Thus, multiple options sometimes exist for reporting on data, and in these cases you have to establish which source will deliver data reliably and is easiest to report on. For example, if you require a report on religious affiliation, the infotype IT0012 (tax data D) is the most reliable source, as this data is relevant to payroll and is therefore carefully maintained.

Customer extensions

SAP provides you with tools that enable you to quickly develop your own infotypes and to extend existing ones by adding your own fields to them. This has no detrimental effect on the SAP standard, and any changes are retained in updates.

The main advantage of this function is that any custom development work that you carry out is available in the logical database without the need for further adaptations (see Section 2.2) and can also be used in SAP Query and Ad Hoc Query InfoSets (see Section 4.1).

History capability

The infotypes can be time-specific; that is, they are saved with a start date and an end date. This often poses a major challenge in reports, especially when information from several infotypes with different validity periods have to be combined for reporting purposes. If you make a selection over a period of time, there may be multiple records of an infotype in this period, with the result that multiple rows are output in the report.

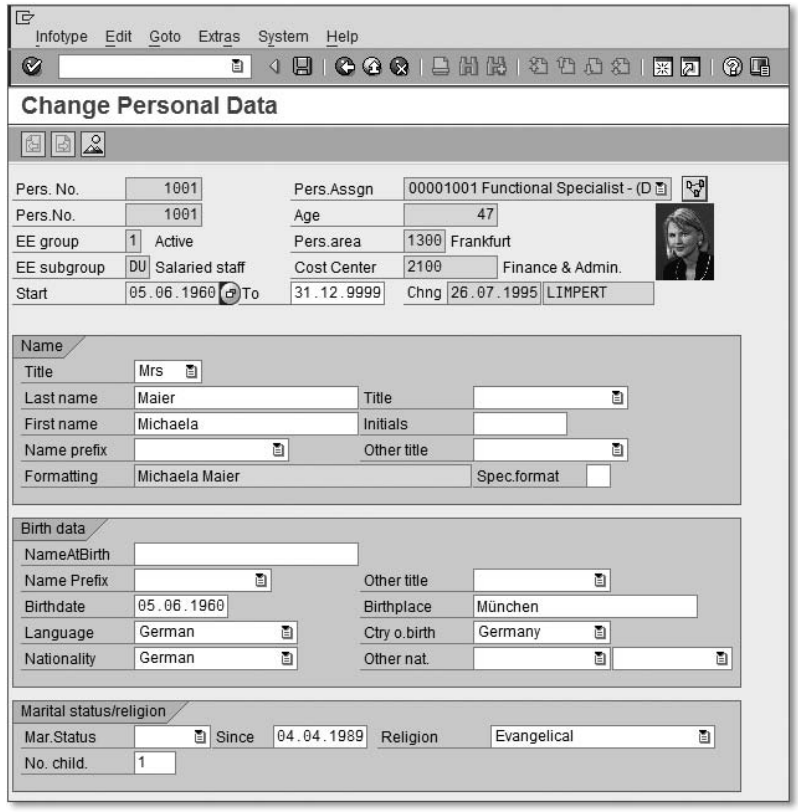

Figure 2.1 Infotype (Personal Data)

[+] The reporting requirements are an important consideration in deciding what infotypes and data fields to use, as a lot of data is maintained for reporting purposes only. This is why analyzing the data basis is always the first step in designing a reporting concept.

2.1.2 Payroll and Time Management Data Clusters

Payroll and time management results are stored in data clusters, which are stored in database table PCL2. Every cluster has its own structure, consisting of multiple tables. Whereas time management is international in nature and always uses cluster B2, there is an individual payroll cluster for each country version, as statutory regulations require specific data in each country.

Figure 2.2 shows the data structure PAYUS_RESULT, which makes reporting on payroll results easier. The structure contains three areas: EVP, the cluster directory; INTER, international payroll result objects; and NAT, national payroll result objects with the US payroll tables. The INTER and NAT areas are based on several tables.

Data structure of payroll result

You can use the sample report RPMUST01 as a template for your own reports. This report is an example of how payroll results are read on the basis of the PAYUS_RESULT structure.

[+]

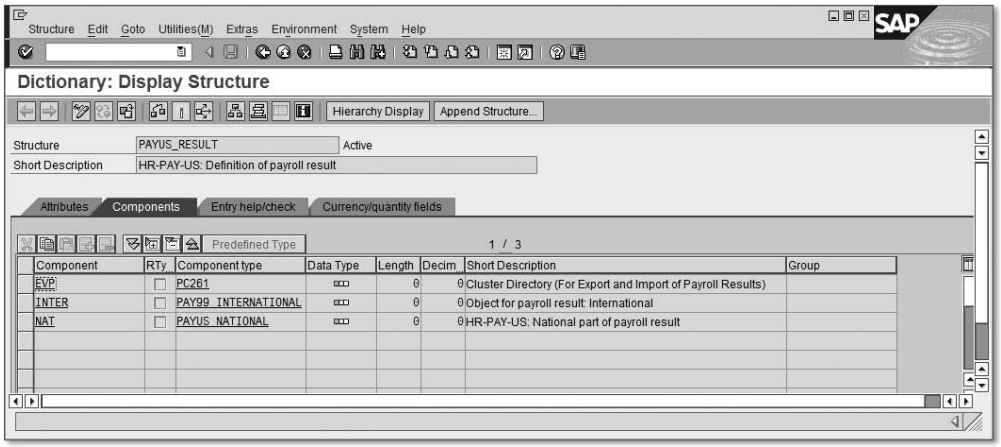

Figure 2.2 Structure of the Payroll Data Cluster

Reporting on payroll and time management results is technically more complex and less convenient than other data types, as you will see in Chapter 4, *Queries*, in particular. There is no logical database that directly retrieves payroll or time management results, so the programmer always has to use function modules to provide the data required for the report.

2.1.3 Personnel Planning Infotypes

The object-based data model for personnel planning consists of objects that are interrelated by links. Each of these objects has properties that are stored in infotypes.

There are many object types in the various personnel planning modules. Table 2.1 lists the object types in the *Organizational Management* module.

Object Type	Text
O	Organizational unit
S	Position
C	Job
T	Task
A	Work center
P	Person
K	Cost center

Table 2.1 Objects in Organizational Management

Objects in Organizational Management

Not all the objects listed have to be used; in practice, Organizational Management usually consists of a hierarchy with the objects O (Organizational unit), S (Position), and C (Job). The external objects P (Person) and K (Cost center) are then linked to these objects. Person and cost center do not originally belong to Organizational Management, but links can be set to external objects such as these. Also, a position can be linked to a personnel number in Personnel Administration, and a cost center in the CO (Controlling) module can be linked either to an organizational unit or to a position. Links such as these create hierarchy trees, and reports can then be run based on these structures.

Links

> Links describe a relationship between two objects. They are defined in two directions: A (bottom-up) and B (top-down), and thus, reports can be run in two directions. For example, starting from a manager, the system can find all his subordinates, while starting from an employee, the system can identify his manager.

Staff assignments

The *organizational structure* is the basis of Organizational Management. The organizational units are arranged hierarchically in this structure. One position per employee is assigned to these organizational units in a concept known as *staff assignments* (see Figure 2.3).

Positions are also linked to jobs. Whereas a position corresponds to the employee's exact role, such as *Secretary Plant Manager Plant 1*, a job provides a general description only, such as *Secretary*.

A position can also be vacant; the property **Vacant** specifies that a position is either to be filled or that it will remain vacant (see Figure 2.3).

Staff Assignments (Structure)	Code	ID	Chief
Human Resources	Hum Res -US	O 50000595	Mr. Mark Taylor
Vice President of Human Resources (US)	VPHR	S 50013548	
Director, HR Initiatives (US)	Dir. HR I-US	S 50000089	
Receptionist	Receptionist	S 50013593	
Compensation and Benefits - (US)	Comp_Ben-US	O 50000603	Mrs Joanne Pawlucky
Labor Relations - (US)	Lab.Rel. -US	O 50000604	Mrs Ann Takahashi
Manager of Labor Relations (US)	Mgr LbRel-US	S 50000205	
Mrs Ann Takahashi	Takahashi	P 00100202	
Supervisor of Labor staff (US)	Supervisor	S 50013097	
Legal Advisor	Advisor	S 50006267	
Legal Advisor	Advisor	S 50013053	
Mr. Michael Houseman	Houseman	P 00100144	
Administration Staff (US)	Administratn	S 50006266	
Administration Staff (US)	Administratn	S 50013399	
Functional Specialist (US)	Func.Spec-US	S 50000206	
Functional Specialist (US)	Func.Spec-US	S 50000243	
Human Resources Administration - (US)	HR Adm. -US	O 50000605	Mr. Tom Peterson
Development and Training Admin - (US)	Dev/Educ -US	O 50000606	Mr. David Payne
Payroll Administration - (US)	Payroll -US	O 50000610	Mr. Timmy Tabasco
Talent Relationship Management(US)	TalRel(US)	O 50012007	Mr. Jack Kincaid
Workforce Planning	Wrkfrce -US	O 50018722	Mrs Jennifer Morris
HR Information Systems (US)	HRIS -US	O 50025100	Mrs Patricia Otto

Figure 2.3 Staff Assignments

The evaluation path determines which objects are processed. Processing starts with an initial object and proceeds through all other objects that are connected to the initial object via the links defined in the evaluation path (see Figure 2.4).

Evaluation path

Evaluation Path: 0-S-P — Internal persons per organizational unit

No.	Obj.Type	A/B	Relat'ship	Relationship name	Priority	Rel.obj.type	Skip
10	O	B	003	Incorporates	*	S	☐
20	S	A	008	Holder	*	P	☐
30	O	B	002	Is line supervisor of	*	O	☐

Figure 2.4 Evaluation Path — Customizing

The evaluation path starts with the organizational unit and searches for all positions linked to that unit. It then reads all the persons assigned to a position and proceeds from there with the next subordinate organizational unit.

This data model can be extended flexibly; for example, you can create your own objects, add your own links, and create your own evaluation paths for reporting purposes.

Extensibility

Organizational Management data is relevant at various points throughout the reporting process. This data is reported on directly in reports, such as a list of open or vacant positions. However, it can also be used to select employees if you select an organizational unit

as the root object and use all employees assigned to the subordinate positions as the selected set. Managers often use this approach for reporting purposes. Therefore, you should take reporting aspects into account when setting up the Organizational Management structure.

2.2 Logical Databases

In the previous section, you learned about the complex structures of SAP ERP HCM. To save you having to reprogram the complex data-reading process every time in every report, SAP provides ready-to-run program routines in what are known as logical databases.

2.2.1 Properties of a Logical Database

A logical database is an ABAP program. It is the basis of reports and InfoSets of the query tools (see Chapter 4, *Queries*) and provides data for reporting and processing purposes. The logical database contains the following functions:

- **Data retrieval**
  Data is read from the database and made available in main memory. Internal tables within the program store data from various infotypes, ready for further processing. The logical database is not a real physical database; instead, it provides access to database tables at the runtime of the report.
- **Selection screen**
  The standard selection screen enables you to restrict the data selection by a variety of criteria. Various fields are available as selection parameters, depending on the structure of the logical database. In many cases, you do not need to define any additional selections in the report.
- **Authorization check**
  The logical database checks whether the user has the appropriate permissions to view the requested data.

[+] The authorization concept in HR is subject to particularly high demands. We strongly recommend that you use a logical database when programming customer reports.

The logical databases in the HCM system are as follows: PNP and PNPCE for personnel administration, PAP for recruitment, and PCH for the Organizational Management, Personnel Development, and Event Management modules.

2.2.2 Logical Database PNP

The logical database PNP is used in the Personnel Administration, Time Management, and Payroll modules. The selection screen of this logical database consists of the areas shown in Figure 2.5:

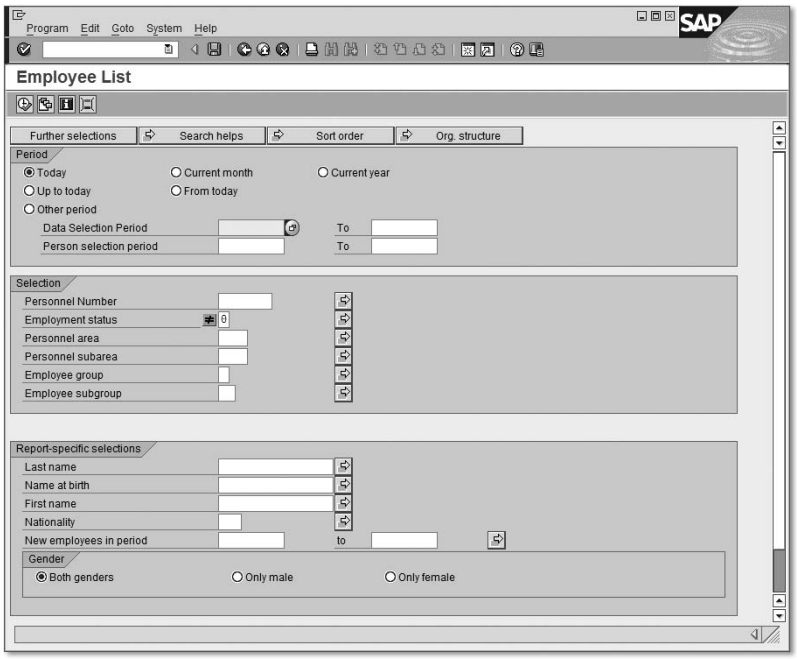

Figure 2.5 Selection Screen of Logical Database PNP

- **Application toolbar**
  The application toolbar contains more functions for making selections, using search help, setting the sort order, and making selections using the organizational structure.

  The **Further selections** button gives you access to additional fields for employee selection. To keep the selections area manageable, not all selection fields are visible by default; use this button to activate them.

The **Search helps** button links the selection and sort order areas in one function. For example, you can use it to select a search help screen for personnel numbers from the list of available search helps (Figure 2.6). You can also define your own search helps.

[Ex] A cost center, for example, can be entered in search help K (Organizational assignment). This has the effect that only employees who are assigned to this cost center are output. At the same time, the sorting process is carried out in accordance with the order of fields in search help K.

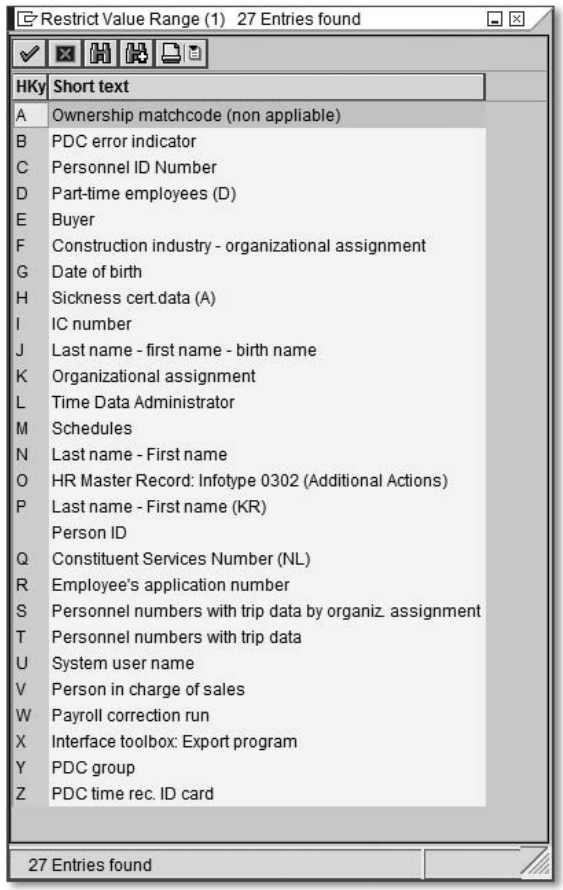

Figure 2.6 Search Helps

The list of employees is processed and output based on personnel numbers in ascending order. You can use the **Sort order** button to select the order of these fields. This functionality is more convenient and therefore preferable to using search helps.

The **Org. structure** button lets you select organizational units and thus restrict the list of employees in accordance with the organizational units you selected.

- **Dynamic selection**
  The button for dynamic selection is located in the general toolbar. Users of this tool rarely use it to its full capacity. The fields available here can be used to create the selection view that is assigned in the HR report category (see Section 2.3). This selection view can contain data from various infotypes, including customer-specific infotypes. The dynamic selection functionality can be used to add any field you want to the Selection block, which consists of fields of the infotypes 0000 (Actions) and 0001 (Organizational Assignment).

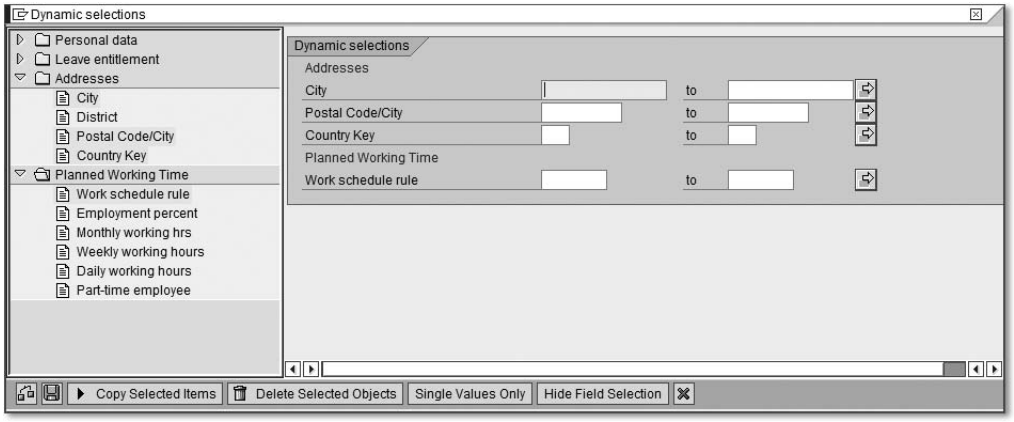

Figure 2.7 Dynamic Selection

- **Period**
  The options under "Period" differentiate between the data selection period and the person selection period. The person selection period refers to the employee selection that has been carried out (see the example below). The data selection period refers to the data to be reported on and displayed.

[Ex] We want to select all employees who are active on 12/31/2006. We also want to display the salary development of these employees during the year 2006.

To select the employees, we set 12/31/2006 as the start date and end date of the person selection period. (It is sufficient to enter the start date only. If the end date field is left empty, the end date is automatically set to be the same as the start date.) We also set the "Employment status" as "not equal to" 0. This selects all employees who are active on 12/31/2006.

We then set the period from 01/01/2006 to 12/31/2006 as the data selection period, as we want the report to read data for the whole year in order to represent the historical development. The report then outputs all data records that exist for that year.

- **Selection**
  This area restricts the list of employees used for the report. All employees are selected who have matched the time period specified under person selection period for at least one day (also see Section 3.1).

[Ex] The person selection period starts on 01/01/2006 and ends on 12/31/2006. Enter 1000 as the personnel area. All employees are then selected who were in this personnel area at some point during this period. (In other words, an employee does not have to have been in this personnel area for the entire period; it is sufficient for each employee simply to have been in this personnel area on 01/01/2006, even if he then moved to another personnel area on 01/02/2006, for example.)

- **Report-specific selections and parameters**
  This screen area has nothing to do with the logical database; it is specific to the individual report. Here, you can define other selection options and program control parameters.

2.2.3 Logical Database PNPCE

The logical database PNPCE has existed since the SAP R/3 Enterprise release and is a successor of PNP. The selection screen shown in Figure 2.8 has undergone the following improvements:

- Simple and clear representation of data selection period and person selection period

- Integration of evaluation period and payroll dates in a single screen, so time periods and key dates can now be selected without the need to switch screens
- Inplace display of dynamic selection
- Integration of buttons into general toolbar

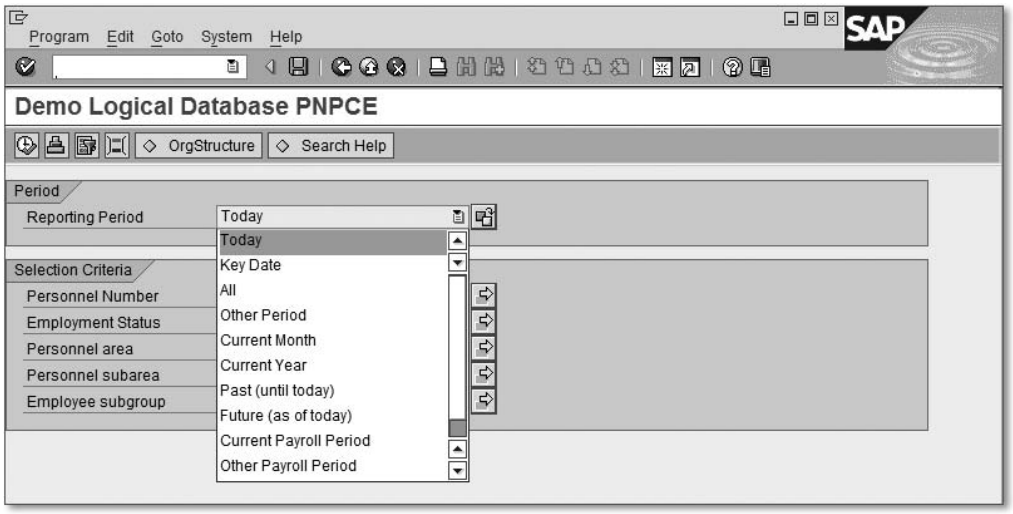

Figure 2.8 Selection Screen of Logical Database PNPCE

Concurrent employment

The most important new addition is support for concurrent employment. In other words, the person identifier is used as a selection criterion, making it possible to process employees with multiple contracts and, therefore, to process multiple person identifiers. This functionality has to be explicitly activated in the customizing.

For more information on the topic of concurrent employment, see Note 517071 in the SAP Service Marketplace. **[+]**

The general improvements to PNPCE can also be used without concurrent employment. SAP recommends that you use them in custom development work. However, most standard SAP reports still use the logical database PNP. SAP is switching over its reports step by step as new developments become necessary.

See Section 6.3 on the specific weaknesses of this logical database. **[+]**

2.2.4 Logical Database PCH

The logical database PCH was designed for the personnel planning data model, in which objects such as organizational units, positions, qualifications, and events are interrelated by links. PCH is used in Organizational Management, Personnel Cost Planning, Event Management, and Personnel Development.

In the selection screen shown in Figure 2.9, one or more objects can be specified as starting points. You can include other objects in the report by specifying an evaluation path.

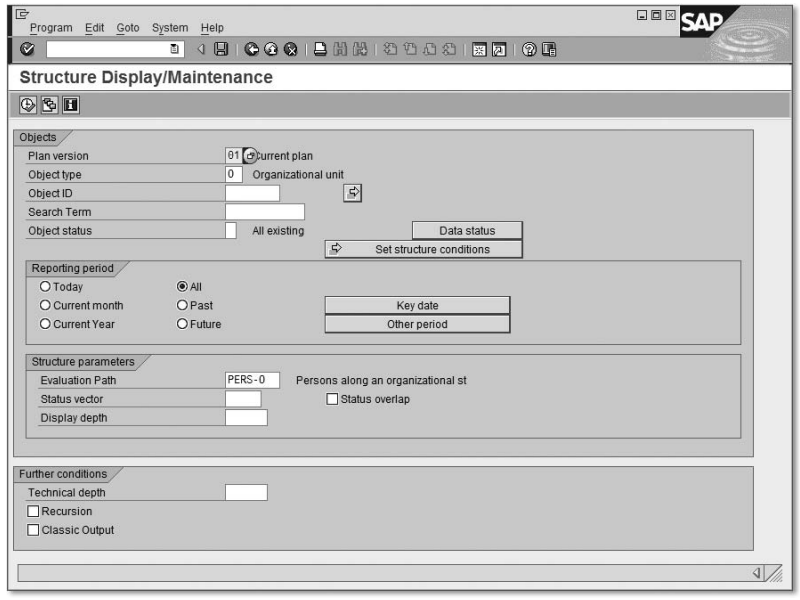

Figure 2.9 Selection Screen of Logical Database PCH

2.2.5 Logical Database PAP

The logical database PAP is used to report on recruitment data. The structure of the data in this database is similar to that of personnel administration data and uses largely the same infotypes, although PAP also uses some infotypes that are required specifically to administrate job applications.

The data is stored in its own area of the database.

[+]

Some terms have a different meaning in the "Applicant" context. In applicant administration, the personnel number is called the applicant number, the employee subgroup is the applicant range, and the employee group is the applicant group.

Figure 2.10 shows the selection screen of the logical database PAP, which is similar to the logical database PNP. However, some of the fields in this screen are specially designed for applicant administration. The receipt of application period and the data selection period are the available time periods. Also, **Advertisement** and **Unsolicited application group** are data items that exist only in applicant administration.

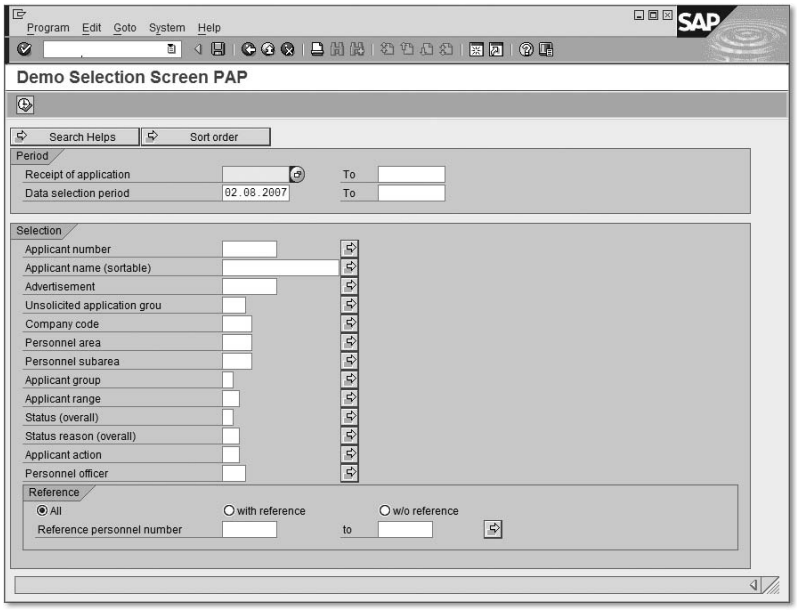

Figure 2.10 Selection Screen of Logical Database PAP

2.3 HR Report Categories

Fine-tuning the selection screen

HR report categories enable you to fine-tune the selection screens of the PNP and PNPCE logical databases. You can make the following settings:

- **Key date, payroll period**
  You can enter the payroll periods as the time periods. You can also restrict your entry to a key date.
- **Data selection period and person selection period**
  You can interlink the data selection period and the person selection period. This means only one entry is required, and the periods are then always identical. It depends on the requirements of the report whether the periods remain identical or whether they will have to be entered separately later on.
- **Permitted selection options**
  This setting enables you to select the selection options you require. In doing so, you specify which ones appear straight away and which ones can be activated using the **Further selections** button.
- **Specify dynamic selection**
  Select the selection view for dynamic selections. This can be a standard selection view (SAP) or a custom-defined selection view (CUS). By doing this, you specify the fields that are available in dynamic selection.

Reading Payroll results

Selection using Payroll results

Selection using Payroll results is a special variant of the selection screen. It is intended to counteract the following weakness in reports on payroll results. If you select a cost center in a report, this selection normally causes the cost center to be checked in IT0001 (Organizational Assignment). However, the cost center may be modified after the payroll is closed. A retroactive accounting process is then carried out in the subsequent period. You can see this in the payroll cluster in table WPBP, but the infotype shows only the most recent status. Selection using Payroll results uses the field in table WPBP and not the infotype fields. This table is read not from the cluster, but from the tables HRPY_WPBP and HRPY_RGDIR. The content of the tables in the payroll cluster have been available in these transparent tables since release R/3 4.6C to make this selection type possible. This modifies the selection screen only; it does not cause any payroll results to be read. The payroll results have to be read using the usual function modules, as before.

Call HR report category

To view the HR report category, open the properties of a report in the ABAP Editor (transaction SE38). Figure 2.11 shows the button you use to access the settings for the HR report category.

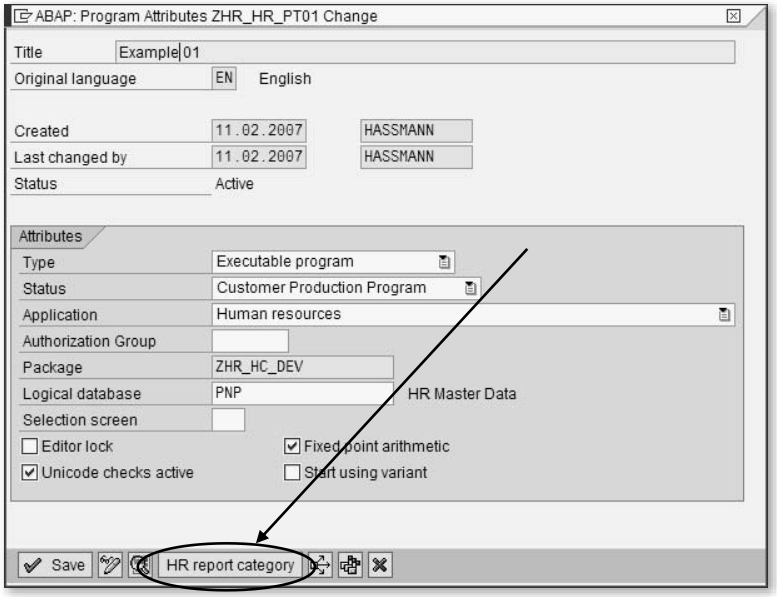

Figure 2.11 ABAP Program Attributes

Click on the **HR report category** button to open the **Report category assignment** window shown in Figure 2.12. Here, you can select a report category or go to the report categories maintenance screen.

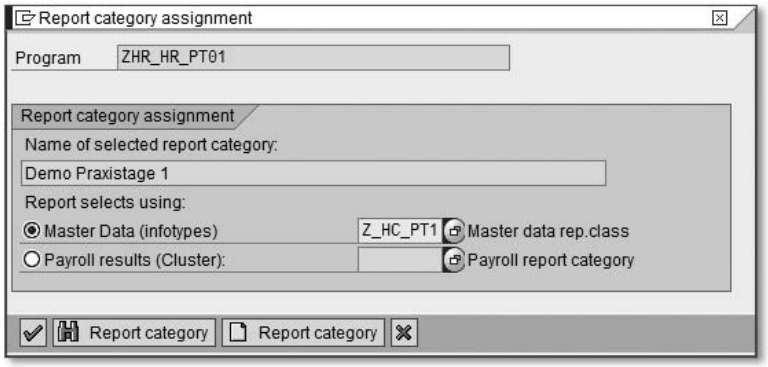

Figure 2.12 Report Category Assignment

You can also adapt the HR report category in the Customizing under the IMG path **Personnel Management • Human Resources Information System • Reporting • Adjusting the Standard Selection Screen • Assign Report Categories**. This enables you to adapt the selection screen of standard reports without modifying them. However, you should do this only if there are good reasons for doing so. Also, you should carefully test your adaptations before using the report. Restricting the functionality using a custom HR report category is less problematic than extending the functionality by adding more selections that may have been purposely left out.

Create a report category

Figure 2.13 shows the parameters of a report category. You first have to determine whether to use the report category for the logical database PNP or PNPCE. The **General data** block can be used to link the data selection period with the person selection period. If you check this box, there will then be only one period to enter in the selection screen, and this period applies equally to the person selection period and the data selection period. The buttons for **Search help** (Matchcode), **Sort,** and selection by **Organizational structure** can also be activated on this screen.

You also have the option to reduce the entry of time periods to key dates or to read the period from the data in the Payroll administration record.

The next step is to assign the **Selection view for dynamic selections**.

Selection view for dynamic selection

Selection views are a little-used but very useful selection option. These can be used to include additional infotype fields that are not contained in the standard selection. You can define your own selection views and assign your own infotypes to them. This gives you the highest possible level of flexibility in terms of the selection options under **Selection View for Dynamic Selections**.

You then specify the allowable selection criteria in the next window. Here, you can choose between fields of infotype 0000 (Actions) and infotype 0001 (Organizational Assignment) and specify which selection criteria appear straight away in the selection screen and which can be activated using the **Further Selections** button.

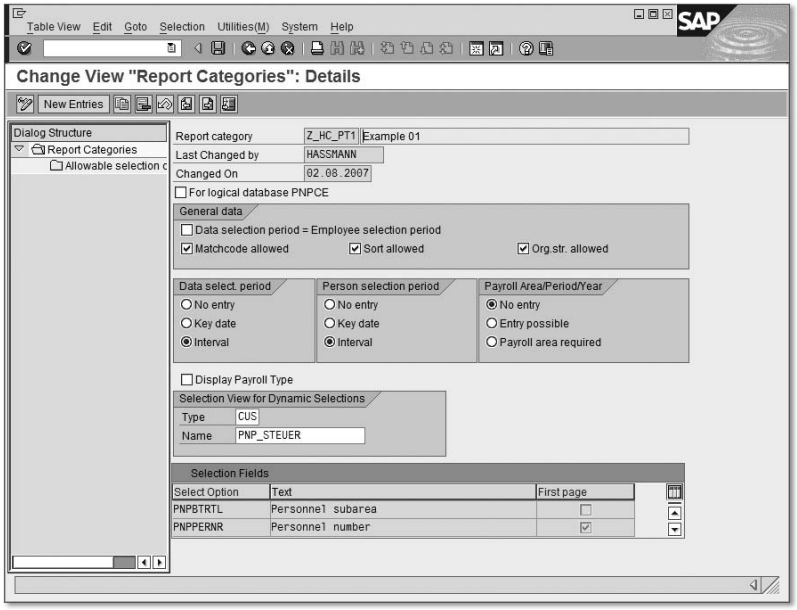

Figure 2.13 Creating a Report Category

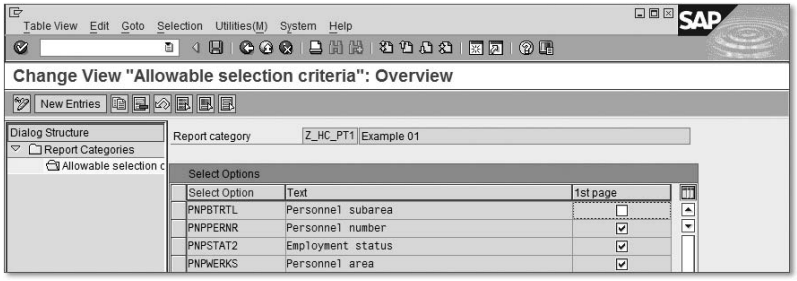

Figure 2.14 Specifying Allowable Selection Criteria

2.4 Authorization Checks in HR Reporting

Usual HR authorizations

As a basic rule, the same authorization checks are used in reporting as in the display and maintenance transactions in the HCM system. This applies in particular to the following authorizations:

- Display and maintenance authorizations for object types, infotypes, and subtypes in Organizational Management (authorization object PLOG)

- Display and maintenance authorizations for infotypes and subtypes in Applicant Management (P_APPL)
- Display and maintenance authorizations for infotypes and subtypes in Personnel Administration (P_ORGIN or P_ORGINCON, or both, P_ORGXX, P_PERNR)
- Display and maintenance authorizations for clusters (P_PCLX)
- Structural authorizations for Organizational Management and Personnel Administration

The following sections deal with how authorizations other than those mentioned above can be or have to be used specially for reporting in SAP ERP HCM. We also go into some detail on cluster authorizations in these sections, as these authorizations are very important in the reporting context.

2.4.1 Calling Reports

There are two authorization options for calling reports.

Starting Reports Using the SAP Easy Access Menu

To authorize users to start reports using the SAP Easy Access menu, go to the **Menu** tab (see Figure 2.15) and open the role maintenance function (transaction PFCG).

Link variants to reports

The **Transaction** button is used to add transactions directly. **Report** is used to create a transaction for a report if one does not already exist. On this screen, you can also create a transaction that calls a specific variant of the report and link a report to a variant using the transaction maintenance function (transaction SE93).

The Profile Generator creates entries in the authorization object **Transaction Code Check for Transaction Start** (S_TCODE) from the transactions that you maintained in the menu. These entries can be modified via the menu only.

To avoid a situation where every transaction is processed using the role maintenance function, the authorization object S_TCODE can also be transferred manually to the profiles and maintained without having to go through the menu. You can also use the placeholder "*" here — for example, "ZPT" would allow all transactions that start with ZPT.

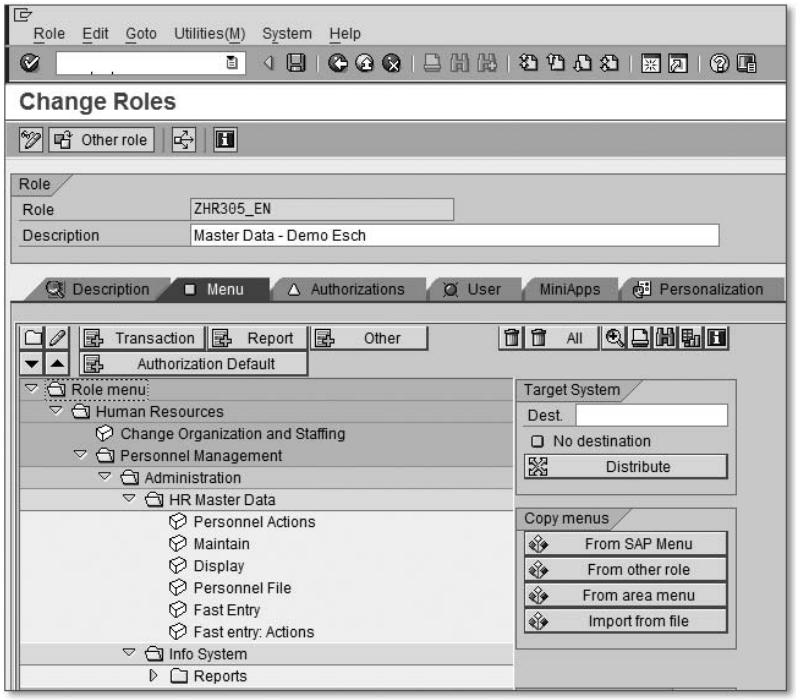

Figure 2.15 Creating an Authorization to Start Reports Using the SAP Menu

Starting Reports Using Transaction SA38

Start reports using SA38

You can start any report by entering its name in transaction SA38 (**System • Services • Reporting**). In doing this, you are initially creating the option on a general level to start reports, rather than assigning an individual authorization for a specific report, so you need to be very careful when assigning authorizations in this way. This is particularly true because there are a few reports in the standard in which no authorization checks are run.

Authorization groups

To create authorization protection in this situation, you have to use the authorization object **ABAP: Program Flow Check** (S_PROGRAM) in conjunction with the authorization group. This field is located in the program attributes, which can be maintained by the programmer.

Because the authorization group is not maintained in several standard SAP programs (or not maintained in the way you require), you

have to do this retroactively. Do this using the report RSCSAUTH (see Figure 2.16).

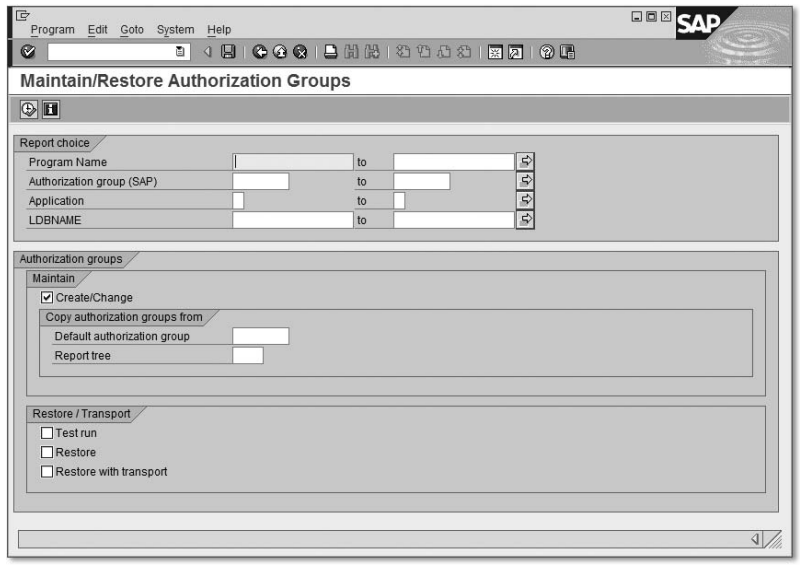

Figure 2.16 Maintaining Authorization Groups in Reports

In the upper part of the screen, use specific criteria to select the standard reports to which you want to assign the authorization groups entered under **Default authorization group**. If you have also created authorization groups in report trees, include these using the **Report tree** option.

The Restore options are needed after upgrades and other new releases of standard programs.

[+] As part of the process of defining your authorization concept, you should decide whether reports will be called using the menu or SA38. If you decide against the SA38 option, you will not need to maintain the authorization groups. Instead, you will have to explicitly assign permission for every report or group of reports.

2.4.2 Simplified Authorization Check for Reports

Authorization object P_ABAP

Because the process of checking read authorizations for master data takes up a lot of computing time, especially in the running of reports,

you may want to restrict or deactivate the check for certain reports. Do this using the authorization object **HR: Reporting** (P_ABAP).

P_ABAP does not replace the basic authorization required to start a report. This basic authorization is administrated by the authorization objects mentioned in the previous section. Rather, P_ABAP simplifies and speeds up the process of checking the reported data. If you assign full authorization for this object, a user can view all the HR master data in the reports, even if he does not have authorization for the relevant infotypes and personnel numbers.

P_ABAP for PNP only

P_ABAP has an effect only in reports that use the personnel administration logical database (PNP).

Two forms of simplification

To maintain authorizations, enter the report name and one of the following two "simplification forms":

- Infotypes and organizational assignment are checked independently of each other. In other words, users can view all infotypes for all personnel numbers to which they have access. This approach speeds up the authorization check.
- When the report is run without checks, no checks of HR master data or structural checks are carried out. This approach makes sense for "uncritical" reports, such as a room directory, and for users who already have full read access to HR master data.

[Ex]

P_ABAP can be used to deactivate the authorization check for all users in the case of a report of employee data that do not have to be protected (such as name, date of birth, and organizational unit).

For example, this authorization object is assigned specially for reports with a critical runtime to users in the central HR department who have full read access to HR master data.

2.4.3 Cluster Authorizations

Frequently used clusters

The authorization object P_PCLX is used for the following, frequently used clusters:

- Master data
  - TX: infotype texts
  - LA: Master data change documents (LB for applicants)

- Time management
  - PC: single-character abbreviation for the monthly calendar, generated every time a presence or absence is updated
  - B1: interface to positive time management, read and written from RPTIME00
  - B2: central time evaluation cluster
- Payroll
  - RU: payroll results (USA)
  - CU: cluster directory
  - PS: generated payroll schema
  - PT: texts for generated schema

The input help for the **Area ID for Cluster** field in the authorization maintenance function of the cluster authorization object provides a full list of all the clusters in the PCL* tables.

2.4.4 Query

If a user is assigned to a user group (see Section 4.1.4) and has access in the user menu to queries via the SAP Query or Ad Hoc Query transaction, he is already able to run queries. This user has access to queries of the InfoSets that are assigned to his user group. Also, this user can run queries that you add directly to his user menu using the role maintenance function.

Authorization object S_QUERY

However, this user cannot save modifications to the queries. Thus, for more advanced work in the query area, you need the authorization object S_QUERY. With this object, you can grant access to the following activities:

- **Create and modify queries**
  The user can create new queries on the basis of the InfoSets in his user group(s) and save modifications to existing queries. You can reserve permission to modify queries for individual users by means of the user group assignments.
- **Maintain environment (InfoSets, user groups)**
  The user can execute transactions SQ02 (InfoSet maintenance) and SQ03 (user group maintenance) and transports. Ideally, end users should not have this authorization.

To extend InfoSets using ABAP code, the additional authorization object S_DEVELOP is also required with the value AQ* for the object name field and PROG for the object type field.

- **Translation (language comparison for SAP Query objects)**
  The user can translate the texts or carry out a language comparison.

If a user has authorization to create and modify queries and to maintain InfoSets and user groups, he has access to the queries of all user groups without being explicitly assigned to them.

[+]

If a query accesses tables outside the logical database, the authorization object S_TABU_DIS is also checked.

Access to the HR data to be reported on is administrated by the usual HR authorization objects and the structural or context-sensitive authorization check. If a field is included in the InfoSet as an additional field by directly reading the database table rather than by means of the logical database, no authorization check is carried out.

However, this would enable you to fulfill the following requirement: A user wants to report on the internal address of infotype 0032 (internal data) but is not authorized to view company car data and thus cannot have full authorization for this infotype.

Role administration

Since Release 4.6C, there is another maintenance tool that serves as an alternative to user group maintenance (SQ03). You can access this tool using transaction SQ10 or by choosing **Environment • Role Administration** in the InfoSet maintenance function (SQ02). Here, you can directly assign the user group to the role. In the next step, assign the InfoSets from the user group. Now every user with this role can run queries of these InfoSets. If a user also has the authorization object S_QUERY with change authorization, he can modify the queries of all other roles. This tool cannot be used to override the change authorization for each user group. This can be done in the user group maintenance function only (see Section 4.1.4).

Authorization groups

Another way of restricting access to queries and InfoSets is to use the authorization group that you maintain in the InfoSet. The authorization group is located in the first screen after the InfoSet is created. For an InfoSet that has already been saved, you can open this screen from the menu by choosing **Goto • Global properties**. The authorization group assigned here has to be entered in the role in the S_PRO-

GRAM authorization object under **ABAP/4 Program Authorization Group** (see Section 2.4.1).

If you are not using authorization groups, this field remains empty in the InfoSet maintenance function. In this case, you do not need the S_PROGRAM authorization object either.

[+] To make it as easy as possible for the user to use SAP Query, we recommend that you prespecify the work area. Do this in the user maintenance function on the **Parameters** tab. The "AQW" and "Blank" entries have the effect that the relevant standard work area is displayed when SAP Query is called.

2.4.5 Manager's Desktop

The authorization object **BC-BMT-OM: Allowable Function Codes for Manager's Desktop** (S_MWB_FCOD) checks each function's authorization for individual users for all the possible functions in the Manager's Desktop (MDT). The input help of the **Function code** field contains a list of the function codes.

2.4.6 Customer Reports

In SAP ERP HCM, authorization checks are carried out in the application system rather than on the database level. Therefore, every authorization check has to be programmed in ABAP/4.

Use logical databases

The most secure and easiest way of checking authorizations in customer reports is therefore to use the relevant logical database, that is, PAP for applicant data, PNP or PNPCE for HR master data, and PCH for data in Organizational Management, Personnel Development, and similar modules. The logical database carries out all the necessary checks. Data that is accessed via the GET command when a user wants to read HR data in the program is thus secure from the authorization point of view.

Use standard function modules

As soon as the need arises in the program to read external data, or in cases where, for example, the logical database cannot be used for performance reasons, the code has to ensure the completeness of the authorization check. Usually, this is done using the *standard function modules* of the SAP system. These function modules usually contain parameters for administrating the authorization check, some of

which are divided up into "normal" authorization checks and structural checks. It is advisable to activate these parameters so that the standard function modules run the authorization checks.

The correct functioning of any standard function modules you use has to be checked as part of upgrades. This also applies when your company starts using new authorization objects.

The code should specify that data be read directly from the database only in very exceptional circumstances. In such cases, the whole authorization check has to be carried out individually for each authorization object with the AUTHORITY-CHECK command.

Remember authorizations for programmers

Also, as indicated above, simple read commands to the database enable *program developers* to view all the data in clients in which they create programs. Special read commands can also be used to give programmers access to data in other clients in the same system.

2.4.7 Special Issues

You need to take the following special issues into account.

Access to Aggregated Data

Total yes, details no

Often a user has to process the statistics of a specific user group but is not allowed access to the source of this data.

[Ex]

An HR controller is not allowed to know the salaries of the board members, but the statistical report he is creating has to include the total salaries of everyone in the company, including the board members.

This is not possible using the standard means, as without the corresponding authorization to the individual data, the report cannot generate the required totals. However, as soon as the required authorization is assigned, the user can view them — in the HR master data display screen, for example.

There are two possible solutions to this problem:

- Use authorization object P_ABAP to deactivate the authorization check (see Section 2.4.2). However, with this approach, there is always the danger that the user runs the report for one person only and accesses the confidential information in this way.

- Create a customer-specific report especially for this purpose. This report would not carry out any authorization check but would have to ensure that the report could not be run for individual personnel numbers.

Behavior of Reports in the Case of Insufficient Authorizations

If a user runs a report but does not have authorization for the data in question, the report skips all rows that contain "forbidden" data.

[Ex] A report contains the names and powers of attorney of all employees. However, a user who runs the report does not have read access to the power of attorney data for some of the selected employees; in these cases, he has access to the names only. The report does not output the data of the employees in question (not even their names). Instead, it simply displays a warning message at the end of the report: "Personnel number skipped due to insufficient authorization."

2.5 Reporting Basics

Reliable data basis

In previous sections, you saw that successful reporting requires a data basis that contains solid information. The data has to be maintained thoroughly, and the relevant information has to be reliable.

Data required for payroll or time management purposes is usually very carefully maintained. If errors are made or data forgotten in these areas, the employee will notice this immediately, and the required corrections are made. Therefore, this data is a solid basis and is frequently used for reports.

[+] As a rule of thumb, you can assume that data will be insufficiently maintained if it is relevant to only a small number of processes and if the user does not have sufficient knowledge of the content or relevance of the data.

In other areas, such as job vacancies, data may be maintained, but inconsistently. If the information on the vacancy is required in a number of different processes that are not functioning correctly because the data hasn't been maintained sufficiently, data quality will increase if data maintenance is carried out properly. In the

example of the vacancy, the process in question could be Personnel Cost Planning, which requires the vacancy information for personnel cost planning, or it could be a process for approving positions for each workflow, for which adequate data maintenance or integration into applicant management are necessary.

Therefore, when new processes are rolled out, you need to check which of the new key figures and information are relevant and how to support full, correct data maintenance through appropriate plausibility checks in the system. For new reports on the basis of existing processes, the data on which the reports are based has to be validated, Field prepopulation and plausibility checks may also be necessary to enable retroactive maintenance and to support data maintenance.

2.5.1 Central Data for Successful Reports

Certain central data in the HCM system needs to be carefully designed and structured, as this data is intensively used both in multiple processes and in reporting.

This central data includes the following:

Infotypes 0000 (Actions) and 0001 (Organizational Assignment)

Customizing the enterprise structure and personnel structure

Data of the infotypes 0000 (Actions) and 0001 (Organization Assignment) are the basis of authorization checks and are used in the selection screens of the logical databases PNP and PNPCE. Therefore, you need to take reporting aspects into consideration when customizing these infotypes. These aspects include the following:

- **Actions and action reasons**
  Entry and leaving, as well as leaving reasons, are particularly important for creating key figures. You have to design a definition concept for leaving reasons for reporting purposes. The important information here is whether the employee in question is leaving the company for his own reasons, or whether there were internal company reasons.
- **Employee group and employee subgroup**
  Employee groups and employee subgroups are important for selecting relevant employees. A frequently used approach is to

create an "inactive" employee group, so that these employees can be omitted from reports. Reporting requirements also need to be taken into account when you are designing the employee subgroups. You should try to keep the number of employee groups and subgroups as small as possible, but an extra employee group or subgroup can often make reporting easier.

- **Personnel area and personnel subarea**
  Personnel areas and personnel subareas can play an important role in reporting — for example, if you want to make divisions or independent parts of the company easy to select for reporting purposes.

Structure of Organizational Management

Structure formation

The structure(s) specified in organizational management are used for reports but are also the basis of employee selection and possibly also of authorization checks for reports. You should take into account the following aspects in relation to these structures:

- **Job catalog**
  There are various requirements of the job catalog, most of which are closely related to reporting requirements. The challenge is to come up with job definitions that apply throughout the company. One reporting requirement would be a salary comparison between employees with the same job.
- **Organizational units**
  The need to assign the information of a hierarchy level — such as board area, department, or team — to an organizational unit is a common one, and you need to take it into account when setting up your organizational structure. One option in this regard is to store the extra information in the object abbreviation. An alternative is to create a special infotype in which the hierarchy level is stored. You could also create the structure numerically; for example, the first level could be equivalent to the board area, the second level to the department, and so on. However, none of these three solutions are directly accessible to reporting in the SAP standard, so you have to decide which solution you prefer and how you are going to incorporate it into your reporting concept.

- **Staff assignments structure**
  The easiest way to select employees in reports for managers is to use the staff assignments. However, if the hierarchy does not reflect the reporting structure, you have to invest extra time and effort, for example, create a special evaluation path or use other information, to correctly assign the areas of responsibility. This is something to keep in mind when creating the organizational structure.

  Another challenge is posed by multidimensional structures, in which the business and disciplinary assignments are different from each other.

The fact that you can define your own evaluation paths creates flexibility in reports. It also shows that reporting plays an important role in modeling organizational management structures.

Wage Types in Payroll and Time Types in Time Management

The creation of wage types and time types for reporting can make reporting tasks easier. For example, it is considerably easier to answer a query regarding how many hours an employee was sick with and without continued pay if there are time types and wage types in which these hours can be saved. Sickness statistics can then be created with a simple wage type or time type report. Alternatively, you could calculate these hours on the basis of the work schedule and absences, but this would require much more programming.

Check which key figures can be reported on on the basis of wage types and time types. **[+]**

2.5.2 Special Features of International Reporting

Many companies also use SAP ERP HCM for their foreign subsidiaries. This situation involves additional challenges.

Unified Definitions of Terms

The data used as a basis for reports has to be comprehensible and usable on an international level. However, in practice, definitions are often based on country-specific conditions, such as the definition of

employee groups and subgroups. For example, few countries differentiate between salaried employees and industrial workers. In Germany, this differentiation is based on past pension regulations that no longer apply but is still enshrined in some collective agreements. It is therefore common practice in Germany to reflect this differentiation in various employee subgroups. This situation is difficult for other countries to understand, as they have no legal basis for the differentiation. Therefore, as this example illustrates, it is important in international reporting to use universal definitions. To give another example, the differentiation between *office worker* and *factory worker* could be changed to create a single internationally applicable term.

Because employee subgroups contain several technical SAP Customizing settings that affect payroll and time management, it is difficult to roll out definitions of employee subgroups on a global level. Some countries manage to do so, whereas others use their own employee subgroups to fulfill payroll and time management requirements. For this reason, you should define a concept that allows for multiple equivalent employee subgroups — for example, by creating defined areas containing employee subgroups with the same definition; 10–20 could correspond to an office worker. Alternatively, you could use the first character to identify the employee subgroup and the second character for the country code.

In Germany, the status **Inactive** also often depends on German legal conditions, such as the end of continued pay. The concept of continued pay as it exists in Germany is unknown in other countries. If someone outside Germany is using a report that is based on German social insurance regulations, such as days that qualify for social insurance coverage, that person will have no basis on which to run the report. Therefore, in this case, the person running the report will have to use the first full month in which no remuneration was paid, for example, as the inactive period.

These parameters have to be agreed upon and embedded in a concept.

Data Harmonization

It is easier to implement key figure definitions for international reporting if you design and implement guidelines for doing so before

rolling out your SAP system. It is difficult to make retroactive data changes (and almost impossible in some areas) such as definitions of employee subgroups. A possible option here would be to load the data into an SAP NetWeaver BI system and harmonize the data when it is loaded. However, the question is still open as to whether this alone would create comparable data, as certain information may not exist at all, such as separate definitions of *office worker* and *factory worker*, or may be used differently in different systems.

Programming Requirements

Programs created in-house are subject to certain requirements. However, these requirements are often not taken into account from the start.

If the system allows users to log on in different languages, tables in the logon language have to be read. Check whether the reading of tables has been programmed with the required level of flexibility. If the system is Unicode-enabled, the programs also have to adhere to Unicode guidelines (see *service.sap.com/unicode*). Program texts have to be translated, and text symbols have to be used rather than text that is embedded in the code.

You also have to ensure that country-specific settings in the program are read correctly. For example, the country modifier (MOLGA) is often preset to **01** in the code, which makes it impossible for users in other countries to use the program.

The resources required to adapt in-house programs for international use should be incorporated into the roll-out schedule.

2.6 Summary

The data structures in SAP ERP HCM are very complex, as there are various modules with different requirements. In addition, not all modules are used to the same level in practice. Therefore, a basic requirement of reporting is that you analyze the data basis to define the data to be output in reports.

In certain modules, such as Payroll, careful data maintenance is a must, whereas in other modules, data is often only maintained spo-

radically. To create a solid data basis, which results in complete and useful reports, you need to decide what processes to install that support and manage data maintenance. In some cases, it is sufficient to carry out retroactive maintenance in response to gaps in data maintenance that are highlighted in reports themselves.

Authorizations are particularly important when it comes to reports involving HR data. You should always strive to avoid the worst-case scenario, in which poorly maintained authorizations enable users to view data for which they do not have the required authorization.

This Appendix contains an overview of all standard reports for the SAP HCM modules including their names, ABAP program names, and the corresponding transaction code. The sequence of the reports corresponds to the sequence in which they are presented in the chapters of Part III in this book. You can download an electronic copy of this Appendix from the publisher's Web site at www.sap-press.com.

B Standard Reports in the SAP HCM Modules: Overview

B.1 Administration

Report	ABAP Program Name	Transaction Code
Flexible Employee Data	RPLICO10	S_AHR_61016362
HR Master Data Sheet	RPPSTM00	S_AHR_61016360
Date Monitoring	AQZZ/SAPQUERY/ H2DATE_MONITOR==	S_PH0_48000450
Education and Training	AQZZ/SAPQUERY/ H2EDUCATION=====	S_PH9_46000224
Time Spent in Each Pay Scale Area/Type/Group/Level	RPLTRF00	S_AHR_61016356
List of Maternity Data	RPLMUT00	S_AHR_61016370
EEs Entered and Left	AQZZ/SAPQUERY/ H2FLUCTUATIONS==	S_PH9_46000223
Service Anniversaries	AQZZ/SAPQUERY/ H2JUBILEE_LIST==	S_PH9_46000216
Powers of Attorney	AQZZ/SAPQUERY/ H2AUTHORIZATIONS	S_PH9_46000225
Family Members	AQZZ/SAPQUERY/ H2FAMILY_MEMBERS	S_PH9_46000222

Report	ABAP Program Name	Transaction Code
Birthday List	AQZZ/SAPQUERY/ H2BIRTHDAYLIST==	S_PH9_46000221
Vehicle Search List	AQZZ/SAPQUERY/ H2CAR_SEARCH====	S_PH9_46000220
Telephone Directory	RPLTEL00	S_AHR_61016354
Headcount Changes	AQZZ/SAPQUERY/ H2STAFF_CHANGES2	S_L9C_94000095
Headcount Development	RPSDEV00	S_AHR_61016373
Assignment to Wage Level	RPSTRF00	S_AHR_61016378
Salary According to Seniority	RPSSAL00	S_AHR_61016376
Nationalities	RPSNAT00	S_AHR_61016374
Statistics: Gender Sorted by Age	AQZZ/SAPQUERY/ H2GENDER_PER_AGE	S_PH9_46000218
Statistics: Gender Sorted by Seniority	AQZZ/SAPQUERY/ H2GEND_P_SENIOR=	S_PH9_46000217
Logged Changes in Infotype Data	RPUAUD00	S_AHR_61016380
Log of Report Starts	RPUPROTD	S_AHR_61016381

B.2 Organizational Management

Report	ABAPProgram Name	Transaction Code
Existing Organizational Units	RHXEXI00	S_AHR_61016491
Staff Functions for Organizational Units	RHXSTAB0	S_AHR_61016492
Existing Jobs	RHXEXI02	S_AHR_61016497
Job Index	RHXSTEL0	S_AHR_61016498
Job Description	RHXDESC0	S_AHR_61016499
Complete Job Description	RHXSCRP0	S_AHR_61016501
Existing Positions	RHXEXI03	S_AHR_61016502
Staff Functions for Positions	RHXSTAB1	S_AHR_61016506

Report	ABAPProgram Name	Transaction Code
Periods When Positions Are Unoccupied per Organizational Unit	RHXFILLPOS	S_AHR_61018869
Staff Assignments	RHXSBES0	S_AHR_61016503
Position Description	RHXDESC1	S_AHR_61016504
Vacant Positions	RHVOPOS0	S_AHR_61016509
Obsolete Positions	RHVOPOS1	S_AHR_61018831
Complete Position Description	RHXSCRP1	S_AHR_61016511
Authorities and Resources	RHXHFMT0	S_AHR_61016507
Planned Labor Costs	RHXSOLO0	S_AHR_61016508
Existing Work Centers	RHXEXI01	S_AHR_61016514
Authorities and Resources	RHXHFMT0	S_AHR_61016516
Existing Objects	RHEXIST0	S_AHR_61016527
Structure Display/Maintenance	RHSTRU00	S_AHR_61016528
Display and Maintain Infotypes	RHDESC00	S_AHR_61016531
Start HR Reporting via Personnel Planning Structures	RHPNPSUB	S_AHR_61016533

B.3 Recruitment

Report	ABAP Program Name	Transaction Code
Variable Applicant List	RPAPL012	S_AHR_61015508
Applicants by Name	RPAPL001	S_AHR_61015509
Applicants by Action	RPAPL004	S_AHR_61015510
Applicants' Education and Training	RPAPL011	S_AHR_61015511
Applications	RPAPL002	S_AHR_61015512
Applicant Statistics	RPAPL005	S_AHR_61015513
Planned Activities	RPAPRT08	S_AHR_61015514

Report	ABAP Program Name	Transaction Code
Vacancy Assignments	RPAPL003	S_AHR_61015515
Vacancies	RPAPL010	S_AHR_61015516
Job Advertisements	RPAPL006	S_AHR_61015517
Recruitment Instruments	RPAPL008	S_AHR_61015518

B.4 Payroll

Report	ABAP Program Name	Transaction Code
Remuneration statement	RPCEDTD0	PC00_M01_CEDT
Remuneration statement with HR-Forms	H99_HRFORMS_CALL	PC00_M01_HRF
Payroll Journal	RPCLJNU0	S_ALR_87014259
Wage Type Reporter	H99CWTR0	S_PH9_46000172
Display Results	H99_DISPLAY_ PAYRESULT	PC_PAYRESULT
Workers' Compensation Report	RPLWCOU0	S_AHR_61016148
Garnishment Details	RPCGRNU0	S_AHR_61016146

B.5 Time Management

Report	ABAP Program Name	Transaction code
Display Work Schedule	SAPMP51S	PT03
Daily Work Schedule	RPTDSH20	PT_DSH20
Absence/Attendance Data Overview	RPTABS20	PT64
Absence/Attendance Data: Calendar View	RPTABS50	PT90; PT90_ATT
Absence/ Attendance Data: Multiple Employee View	RPTABS60	PT91; PT91_ATT
Attendance Check	RPTEAB00	PT62

Report	ABAP Program Name	Transaction code
Absence/Attendance Overview Graphic	RPTLEA40	PT65
Time Statement	RPTEDT00	PT_EDT_TEDT
Cumulated Time Evaluation Results: Time Balances/Wage Types	RPTBAL00	PT_BAL00
Time Accounts	RPTDOW00	PT_DOW00
Display Absence Quota Information	RPTQTA10	PT_QTA10
Time Evaluation Messages	RPTERL00	PT_ERL00
Display Time Evaluation Results (Cluster B2)	RPCLSTB2	PT_CLSTB2

B.6 Personnel Development

Report	ABAP Program Name	Transaction Code
Profile Matchup	SAPLRHPP	PEPM
Profiles	SAPLRHP6	PEPP
Search for Qualifications	SAPLRHPD_SEARCH	PPPE_SEARCH_FOR_Q
Appraisals	SAPLRHPA_REPORTING	APPSEARCH
Profile Matchup: Positions/Holders	RHXPEP01	S_AHR_61015532
Profiles (Organizational Units)	RHXPEP02	S_AHR_61015533
Expired Qualifications	RHXPE_EXPIRED_QUALI	S_AHR_61015536

B.7 Training and Event Management

Report	ABAP Program Name	Transaction Code
Attendee List	RHXTEILN	S_PH9_46000434
Attendance List	RHXTEILA	S_PH9_46000433
Employee List	RHXFIRMA	S_PH9_46000432
Bookings per Attendee	RHXBUCH0	S_AHR_61016215
Attendee's Training History	RHXTHIST	S_PH9_46000431
Attendance Prerequisites	RHXKVOR0	S_PH9_46000430
Attendee's Qualifications	RHXQALIF	S_PH9_46000429
Attendance Statistics	RHXKURS2	S_ALR_87014085
Cancellations per Business Event/Attendee	RHXSTOR0 RHXSTOR1	S_PH9_46000424 S_AHR_61016216
Business Event Demand	RHXKBED0	S_AHR_61016220
Business Event Information	RHSEMI60	S_PH0_48000476
Business Event Dates	RHXKBRO1	S_AHR_61016219
Resources Not Yet Assigned per Business Event	RHXORES1	S_PH9_46000436
Resource Equipment	RHXRESA0	S_AHR_61016224
Instructor Information	RHSSREF0	S_PH0_48000096
Resource Reservation	RHRBEL00	S_ALR_87014087

B.8 Personnel Cost Planning

Report	ABAP Program Name	TransactionCode
Display an Existing Scenario Group	RHPP25LI	S_AHR_61015559

B.9 Benefits

Report	ABAP Program Name	Transaction Code
Eligible Employees	RPLBEN01	HRBEN0071
Participation	RPLBEN02	HRBEN0072
Changes in Benefits Elections	RPLBEN07	HRBEN0077
Change of Elibility Status	RPLBEN09	HRBEN0079
Changes in General Benefits Information	RPLBEN13	HRBEN0083
Health Plan Costs	RPLBEN03	HRBEN0073
Insurance Plan Costs	RPLBEN04	HRBEN0074
Savings Plan Contributions	RPLBEN05	HRBEN0075
Flexible Spending Account Contributions	RPLBEN08	HRBEN0078
Stock Purchase Plan Contributions	RPLBEN16	HRBEN0086
Costs/Contributions for Miscellaneous Plans	RPLBEN15	HRBEN0085
Vesting Percentages	RPLBEN06	HRBEN0076
Contribution Limit Check	RPLBEN18	HRBEN0088
Employee Demographics	RPLBEN11	HRBEN0081
Benefit Election Analysis	RPLBEN17	HRBEN0087
Enrollment Statistics	RPLBEN19	HRBEN0089

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