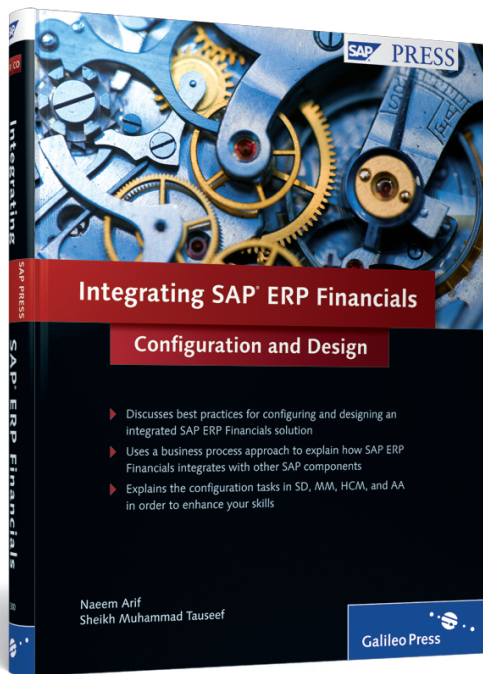


Naeem Arif and Sheikh Muhammad Tauseef

Integrating SAP® ERP Financials

Configuration and Design



Galileo Press 

Bonn • Boston

Contents at a Glance

1	Introduction	21
2	SAP Enterprise Structure	27
3	Integrating the Sales-Order-to-Cash-Receipt Process	59
4	Integrating the Purchase-Order-to-Payment Process	139
5	Integrating SAP ERP HCM with SAP ERP Financials	211
6	Integrating Asset Accounting, Investment Management, and Project Systems	257
7	Special Topics	345

Contents

Preface	15
Acknowledgments	19
1 Introduction	21
1.1 What Is Integration?	21
1.2 Configuring SAP ERP for an Integrated Solution	22
1.3 Four Approaches to Good Integration	22
1.4 SAP Navigation Basics	23
1.5 Accessing the Customizing or Configuration Areas	25
1.6 Summary	25
2 SAP Enterprise Structure	27
2.1 Enterprise Structure Elements: Definition and Basic Configuration	28
2.1.1 Company Code	28
2.1.2 Controlling Area	31
2.1.3 Credit Control Area	36
2.1.4 Business Area	37
2.1.5 Chart of Accounts	37
2.1.6 Chart of Depreciation	39
2.1.7 Sales Organization	41
2.1.8 Purchasing Organizations	43
2.1.9 Personnel Area and Subareas	44
2.2 Key Master Data Objects	45
2.2.1 General Ledger Account	45
2.2.2 Cost Elements	50
2.2.3 Cost Center	52
2.2.4 Profit Center	53
2.2.5 Internal Order	55
2.2.6 Segment	57
2.3 Summary	58

3	Integrating the Sales-Order-to-Cash-Receipt Process	59
3.1	Process Overview	60
3.1.1	Sales Orders	60
3.1.2	Delivery Notes	61
3.1.3	Billing Documents	61
3.1.4	Accounts Receivable Invoices	61
3.2	Configuring and Integrating Sales and Distribution	
	Organizational Elements	62
3.2.1	Configuring Organizational Objects	63
3.2.2	Linking Organizational Objects	70
3.2.3	Assigning Sales Areas to Credit Control Areas	70
3.2.4	Assigning Business Area Accounts	71
3.3	Setting Up S2C Master Data: Customer Master Data	72
3.3.1	General Data	74
3.3.2	Company Code Data	77
3.3.3	Sales Area Data	79
3.4	Setting Up S2C Master Data: Material Master Data	82
3.4.1	Basic Data 1 Tab	82
3.4.2	Sales Org 1 Tab	83
3.4.3	Sales Org 2 Tab	84
3.5	Sales Order	85
3.5.1	Sales Order Type	87
3.5.2	Pricing	89
3.5.3	Text Determination	93
3.5.4	Sales Document Copy Data	95
3.5.5	Item Categories	97
3.5.6	Incompletion Procedure	97
3.5.7	Account Assignment Groups	99
3.6	Delivery	100
3.7	Billing Documents	101
3.8	Account Determination	107
3.8.1	Account Determination Procedure KOFI	107
3.8.2	Errors in Account Determination	112
3.9	Accounts Receivable Invoice	113
3.9.1	Accounts Receivable Invoice Header	113
3.9.2	Document Line Items	116
3.9.3	Payment Terms	120
3.10	Incoming Payments	122

3.10.1	Configuring Customer Tolerances	123
3.10.2	Automatic Clearing	125
3.11	Debtor Management	126
3.11.1	Credit Management	126
3.11.2	Dunning	133
3.12	Summary	138

4 Integrating the Purchase-Order-to-Payment Process 139

4.1	Process Overview	140
4.1.1	Purchase Order	141
4.1.2	Goods Receipt	141
4.1.3	Invoice Verification	141
4.1.4	Accounts Payable Invoice	142
4.1.5	Outgoing Payments	142
4.2	Configuring and Integrating Materials Management	
	Organizational Elements	143
4.2.1	Purchasing Organizations	143
4.2.2	Purchasing Groups	146
4.2.3	Plants	147
4.2.4	Storage Locations	149
4.3	Setting Up P2P Master Data: Material Master Data	151
4.3.1	Configuring Material Master Data	151
4.3.2	Maintaining Financial Accounting Fields in Material Master Records	155
4.4	Setting up P2P Master Data: Vendor Master Data	158
4.4.1	Configuring Vendor Master Data	159
4.4.2	Maintaining Financial Accounting Fields in Vendor Master Records	163
4.5	Purchase Orders	169
4.6	Account Determination	170
4.6.1	Defining Valuation Classes	171
4.6.2	Defining Account Groupings for Movement Types	174
4.6.3	Defining Account Determination	178
4.7	Good Receipts	186
4.7.1	Posting Goods Receipts	187
4.7.2	Effects of Posting Goods Receipts	188
4.8	Invoice Verification	189
4.9	Outgoing Payments	192

4.9.1	Defining Vendor Tolerances	192
4.9.2	Automatic Posting of Payment Differences	193
4.9.3	Defining Payment Block Reasons	195
4.9.4	Processing a Manual (Outgoing) Payment	196
4.9.5	Configuring the Automatic Payment Program	198
4.9.6	Running the Automatic Payment Program	207
4.10	Summary	210

5 Integrating SAP ERP HCM with SAP ERP Financials 211

5.1	Process Overview	212
5.1.1	Organizational Management	212
5.1.2	Payroll	215
5.2	Configuration and Design of SAP ERP HCM Building Blocks	217
5.2.1	Personnel Area and Subareas	218
5.2.2	Employee Groups and SubGroups	220
5.2.3	Payroll Area	220
5.2.4	Payroll Control Record	221
5.2.5	Payroll Calendar	222
5.2.6	Organizational Structure	225
5.3	Employee Master Record	225
5.3.1	Infotype 0000: Actions	227
5.3.2	Infotype 0001: Organizational Assignment	228
5.3.3	Infotype 0002: Personal Details	229
5.3.4	Infotype 0006: Address	229
5.3.5	Infotype 0007: Planned Working Time	230
5.3.6	Infotype 0008: Basic Pay	230
5.3.7	Infotype 0009: Bank Details	232
5.3.8	Infotype 0014: Recurring Payments and Deductions	233
5.3.9	Infotype 0016: Contract Elements	234
5.3.10	Infotype 0027: Cost Distribution	234
5.3.11	Infotypes 0207 and 0209: US-Specific Infotypes	235
5.3.12	Infotype 2010: Employee Remuneration	235
5.4	Configuration and Design of Payroll	236
5.4.1	Payroll Driver	237
5.4.2	Payroll Schema	239
5.4.3	Wage Types	240
5.4.4	Symbolic Accounts	241
5.4.5	Account Determination	243

5.4.6	Vendor/Customer Account Determination	246
5.4.7	Full Payroll Posting to Finance	246
5.4.8	Payroll Posting Variant	253
5.5	Summary	255

6 Integrating Asset Accounting, Investment Management, and Project Systems 257

6.1	Overview of the Asset Lifecycle	258
6.1.1	Assets Acquisition Through External Vendor/ Investment Order/Projects	258
6.1.2	Asset Transfers	259
6.1.3	Depreciation Posting	260
6.1.4	Asset Retirement	260
6.2	Core Configuration of Asset Accounting and Investment Management	260
6.2.1	Core Configuration of Asset Accounting	261
6.2.2	Core Configuration of Investment Management	278
6.3	FI-AA Account Determination	292
6.3.1	Define Accounts in Account Determination Settings	292
6.3.2	Specify Document Type for Posting Depreciation	294
6.3.3	Parallel Ledgers in SAP General Ledger and Integration with Asset Accounting	295
6.4	Master Data	298
6.5	Asset Acquisition Through Investment Order	302
6.5.1	Create an Investment Order and Asset Under Construction (AuC)	303
6.5.2	Maintaining Budgets for Investment Orders	307
6.5.3	Posting a Vendor Invoice	308
6.5.4	Settlement of Investment Order to AuC	310
6.5.5	Transfer of the AuC to Final Fixed Asset	313
6.5.6	Change the Investment Order Status to Complete	316
6.6	Posting Values to Assets Using External Acquisition	316
6.7	Post Transfers to Other Assets	320
6.8	Post Depreciation Run	322
6.9	Post Retirements with Scrapping	324
6.10	Project Systems	326
6.10.1	Enterprise Structure	327
6.10.2	Core Configuration for Creating a Project	328

6.10.3	Field Selection for WBS and Projects	334
6.10.4	Project Milestones	335
6.10.5	Creating a Project	336
6.10.6	Project Posting Lifecycle	341
6.10.7	Additional Functionality	342
6.10.8	Conclusion	344
6.11	Summary	344

7 Special Topics 345

7.1	Interrogating SAP ERP Tables with the Data Browser (Transaction SE16)	345
7.2	Easing Data Migration with the Legacy System Migration Workbench	350
7.2.1	Define the LSMW Parameters	352
7.2.2	Maintain Object Attributes	353
7.2.3	Maintain Source Structure	358
7.2.4	Maintain Source Fields	359
7.2.5	Maintain Structure Relations	361
7.2.6	Maintain Field Mapping and Conversion Rules	362
7.2.7	Maintain Fixed Values, Translations, and User- Defined Routines	363
7.2.8	Specify Files	363
7.2.9	Create Load File	365
7.2.10	Upload Load File Data	366
7.2.11	Create Batch Input Session	368
7.2.12	Run Batch Session	368
7.3	Making Your Vendor/Customer Line Item Reports Work for You ...	369
7.3.1	Changing Line Item Layout in Reports	371
7.3.2	Defaulting Layouts into a User's Profile	372
7.4	Enforcing Additional Organization Checks by Configuring Your Own Validations	373
7.4.1	Define Prerequisites	375
7.4.2	Define Checks	376
7.4.3	Define the Message	377
7.5	Using Substitutions to Allocate Default Account Assignment Objects	379
7.5.1	Prerequisite	381

7.5.2	Substitution	382
7.5.3	Validations and Substitutions in Asset Accounting	384
7.6	Summary	385
The Authors		387
Index		389

This chapter explains the integration of SAP ERP Human Capital Management and SAP ERP Financials, focusing on two specific areas: Organizational Management and Payroll.

5 Integrating SAP ERP HCM with SAP ERP Financials

This chapter looks at the integration of SAP ERP Human Capital Management (SAP ERP HCM) and SAP ERP Financials. SAP ERP HCM replaces the SAP Human Resources component, which has been significantly expanded and now covers a number of areas.

In this chapter, we focus on the integration-related configuration and design of two SAP ERP HCM topics that have a significant amount of integration with SAP ERP Financials: Organizational Management (OM) and Payroll.

In Section 5.1, Process Overview, we offer an overview of the business processes involved in both topics. We start looking at OM in Section 5.2, where we focus on the building blocks of SAP ERP HCM, which you need to understand to follow the subject of Section 5.3. In Section 5.3, Employee Master Record, we focus on the key screens and fields on the employee master record that are relevant for payroll integration, and so complete our review of OM. Finally, we conclude the chapter with a discussion of the configuration and design of Payroll, as well as the all-important review of the posting of payroll to SAP ERP Financials, and the related integration points.

Note

The employee master record is a key part of integration so we have given it a separate section in this chapter to allow you to focus on all of the complexities that surround it.

Country-Specific Settings

The tricky thing about SAP ERP HCM is that the information sources governing the processes are the employment laws of the country in which you operate. For this reason, after you implement SAP ERP HCM, you must also implement the country-specific settings provided by SAP ERP. To keep on top of changes in statutory rules or regulations, you must keep your records up to date and ensure that you regularly download updates from SAP ERP.

As a result of the country-specific settings of SAP ERP HCM, you will notice that the IMG has country-specific menu paths. In the examples in this chapter, we look at settings for the United States and Great Britain; however, you should consult your own country-specific IMG location to see your own country-specific settings.

5.1 Process Overview

Although many people mistakenly assume that the payroll process is the only area that SAP ERP Human Capital Management covers, the component is actually quite extensive. A comprehensive review (which is out of the scope of this book) would include the following:

- ▶ Employee administration
- ▶ Recruitment
- ▶ Personnel development
- ▶ Time management
- ▶ Benefits administration
- ▶ Talent management

In this section, we provide a process overview of the subjects that are most relevant to integration with SAP ERP Financials: OM and the payroll process. For each, we summarize the process, explain the key steps or objects, and discuss the points of integration.

5.1.1 Organizational Management

Put simply, Organizational Management allows you to draw up your company's organizational structure, that is, charts that show who works where and who

reports to whom. If you think of this structure as a tree, each point in the tree represents a position and job role in the company. Using these charts, you can see in which department employees are located, which in turn should correlate to the cost center and hierarchy structure for your organization.

The complexity of these organizational charts varies from company to company. Of course, if you wanted to put a structure together for a company with 1000 employees, it would be a lot simpler than a multinational company operating in different sectors and different countries. However, regardless of its complexity, you can use the information contained in an organizational chart to drive and control a number of processes, such as approval of expenses or performance management.

There are many ways of managing an organizational chart, and SAP ERP is partnered with a number of products that facilitate this process. For the purposes of this chapter, however, we are concerned only with the standard delivered SAP ERP tools. Using these tools, you can define *nodes*, or positions, that represent a certain job in the organization. The system comes preloaded with more than 30 standard objects, but you can also create custom objects as necessary. Following are the main objects with which you should familiarize yourself:

► **Organizational unit**

Every company is split into departments that OM represents using *organizational units*. This structure should reflect the way your company is set up, so it's not something that is fixed or defined.

► **Position**

Within the organizational structure, *positions* exist to define where people actually sit within the organization: what they do, and whom they report to. This is usually fairly straightforward, in that one person occupies one position within an organization; however, it is possible to set up job sharing, whereby people work in several different positions, each for a certain percentage of their time. Positions can be assigned a specific cost center or can inherit one from a higher position; this defines where costs for this position are posted. A specific position's costs may also need to be distributed to different account assignment objects.

► **Job**

A *job* in OM is a simple concept that defines the set of responsibilities belonging to a specific position. For example, the position of AP clerk has a set of

specific responsibilities, which means that, if you have five AP clerks, they should usually be doing the same job.

▶ **Work center**

A *work center* is a location where work is actually done, such as a workstation where a graphic designer is using his PC, a workshop, or a section within a workshop. This information is useful for shift planning, among other things.

▶ **Cost center**

If you are familiar with SAP ERP Financials, you already know that cost centers are the main cost assignment object. Because employees usually incur costs, cost centers are the most common account assignment object to assign these costs to. The most frequent expense is the cost of paying an employee, but there are other costs, such as expenses and/or training, that need to be posted to an account assignment object. You can use other account assignment objects as well, for example, work breakdown structures (WBS) and internal orders (both of these concepts are discussed in more detail in Chapter 6, Integrating Asset Accounting, Investment Management, and Project Systems). In addition, when running balance sheet postings, you usually post to profit centers (as you will recall from Chapter 2, SAP Enterprise Structure).

Before we look at a specific organizational structure, let's consider some basic properties of such structures:

- ▶ Every person in the structure must have a chief, someone who is responsible for the people below him.
- ▶ Every position must have a person assigned to it.
- ▶ Reporting moves upward, so approvals for a certain position go the person above that position.

Figure 5.1 shows an organizational structure with units, positions, and — most importantly — people assigned.

As you can see, each object is assigned a unique eight-digit code, which is the way SAP ERP internally indexes and stores this information.

The organizational structure is used to determine a person's manager. This is important for both SAP ERP HCM and Financials purposes because managers are required to approve costs incurred by their staff.

Staff Assignments (Structure)	ID	Chief	Workflow
[-] IDES AG	O 00000001		
[-] IDES New Zealand Company	O 50003514	Managing Direc...	
[-] Compañía Modelo CO	O 50003776	Director General	
[-] Exec.directory - Germany	O 00000100	Dr. Herbert Bra...	
[-] Executive Board - Italy	O 00000220		
[-] IDES Nederland	O 50002925		
[-] Executive Board - USA	O 00000300	Mrs Debbie Dav...	
[-] Chief Executive Officer (US)	S 49999998		
[-] Executive Assistant to CEO (US)	S 49999999		
[-] Operations - (US)	O 50000590	Mr. John Willia...	
[-] Human Resources	O 50000595	Mr. Mark Taylor	
[-] Information Services - (US)	O 50000597		
[-] Vice President - Information Serv. (US)	S 50000175		
[-] Mr. Azam Arif MBA	P 00099001		
[-] Network and Telecomm Services- US	O 50016648		
[-] Business Systems Support (US)	O 50022115		
[-] IT End User Services - (US)	O 50028927		
[-] IT Support Services - (US)	O 50010271		
[-] Sales - (US)	O 50000611		
[-] Recruiting (US)	O 50003726		
[-] Product Development	O 50003800		

Figure 5.1 Organizational Structure

5.1.2 Payroll

Payroll remains the highest profile area of SAP ERP HCM and is important in understanding Financials and SAP ERP HCM integration. The process starts in SAP ERP HCM, when employees exist and their salary and deductions are calculated. After calculating the overall payroll, we then determine the correct general ledger accounts and account assignment objects before creating the financial postings.

The payroll process involves the following key concepts:

▶ **Payroll Engine**

The *Payroll Engine* is the name given to the program that calculates and posts payroll results. It takes into consideration a number of different things, including the following:

- ▶ A country's statutory requirements
- ▶ An employee's basic pay
- ▶ Time and attendance information

As previously mentioned, SAP ERP provides country-specific templates that can calculate rules for you. These rules are stored within the payroll schema, and, if needed, can be enhanced to include an organization's specific requirements.

► **Payroll area**

Payroll areas allow you to control the way in which you pay people. Many organizations have employees that are paid for different time periods (e.g., weekly or monthly). With Payroll, you can pay different payroll areas over different payroll periods. All employees are assigned to a single payroll area.

► **Retroactive (retrospective) changes**

You can process retroactive payments in SAP ERP HCM because sometimes corrections to employee data are not known or processed until after payment is made. Thus, if an employee is entitled to back pay, this can be automatically calculated based on the change in circumstances. The HR changes are time specific and date specific, so when you next run payroll, the system calculates the changes and makes the adjustment in the next available period.

Note that changes in configuration do not trigger retroactive changes; only changes to master data trigger these changes. If you need to make a retroactive calculation, you must force the posting through or wait until the next payroll run.

Now that we've explained the key concepts in the payroll process, let's look at its three separate stages: the prerequisite stage, the payroll run, and the closing stage (also known as the *exit payroll* activity).

Prerequisite Stage

The system configuration for Payroll is based around the settings you make for the payroll area and the associated payroll calendar, which dictates the paydays. The process runs across the entire period, starting with the completion of the old payroll posting run. The payroll administrators then move on to the input phase, where they perform the administrative task of making changes to existing payroll records. This action is time-sensitive, meaning that they must start the payroll process at a specified day in the period to meet the time scales for the actual payment run.

All of this information tends to be contained within or linked to the payroll control record, which we discuss in more detail in the configuration part of the chapter (see Section 5.2.4, Payroll Control Record).

Payroll Run

After you start the payroll cycle, the system locks all payroll data and records while it runs a payroll proposal, just as it would run an F110 (automatic outgoing payments) proposal. This is called the *payroll simulation* run. You can run this several times to review the output and then make corrections to data that appears incorrect. Again, the only constraint is the payroll time table, which dictates when you need to run the real payroll posting run.

The Payroll Driver is the program that calculates your pay and references a collection of sources, including the rules defined within your payroll organizational structure, the payroll schema, the data captured on your employee master record, and any time recoding information that may be relevant to your final pay.

The actual calculation of the amount paid is based on what each employee is entitled to be paid, less any deductions they are due to make. Each element of pay is known as a *wage type*; there are wage types for all sorts of things, including basic pay, deductions, and bonuses.

Exit Payroll

When the processing is complete, you must physically exit Payroll, which releases the control record and indicates that payroll administrators can start working on the next payroll period. This ensures that at any given point in time, the payroll is running on a fixed data set. If this were not the case, it would be possible for the actual payroll to differ from the figures in the payroll simulation. Even worse, the system could allow you to run a simulation successfully but then produce an error when you tried to complete the real payroll run.

The completion of the entire payroll process is the posting of a file (or files depending on the size of your payroll) to the ledger. We discuss this in more detail later (see Section 5.4.7, Full Payroll Posting to Finance).

5.2 Configuration and Design of SAP ERP HCM Building Blocks

This section looks at the configuration and design of the core objects that are needed as the basis for this chapter; these objects are the building blocks needed to execute the processes we cover.

Note

In this section, we only cover the building blocks that support our understanding of OM and Payroll.

In this section, we discuss the following objects:

- ▶ Personnel area
- ▶ Payroll area
- ▶ Control record
- ▶ Period/date modifier
- ▶ Payroll calendar

Note

Remember, as we mentioned earlier, these configuration settings are country specific.

In SAP ERP HCM, these key organizational objects are collectively referred to as the *personnel structure* of a company.

5.2.1 Personnel Area and Subareas

From an SAP ERP Financials perspective, we are used to seeing the company code represent legal entities in line with statutory law. In addition to statutory laws, organizations also need to comply with HR laws, that is, the rules governing the way in which you employ and pay people. The personnel area is the highest object on the HR side, and we should use this to represent our HR rules and regulations. The personnel area is a placeholder against which you can assign the various rules and configuration objects, but you can also run reports against personnel areas. During configuration, personnel areas are assigned to company codes, as you can see in Figure 5.2.

Many types of laws affect HR rules, including the following:

- ▶ Tax law
- ▶ Benefits law
- ▶ Contributions law
- ▶ Recruitment law
- ▶ Civil law

Whenever there is a situation where there could be a difference in these laws, you may find separate personnel areas being set up.

Within the personnel area, there are other ways of segregating employees; the personnel *subarea* can be used to group together different types of employees. For example, you may have subareas for different parts of the country, or you may choose to set up subareas for salaried versus hourly staff.

Figure 5.2 shows where the configuration of the HR ENTERPRISE STRUCTURE is found within the IMG.

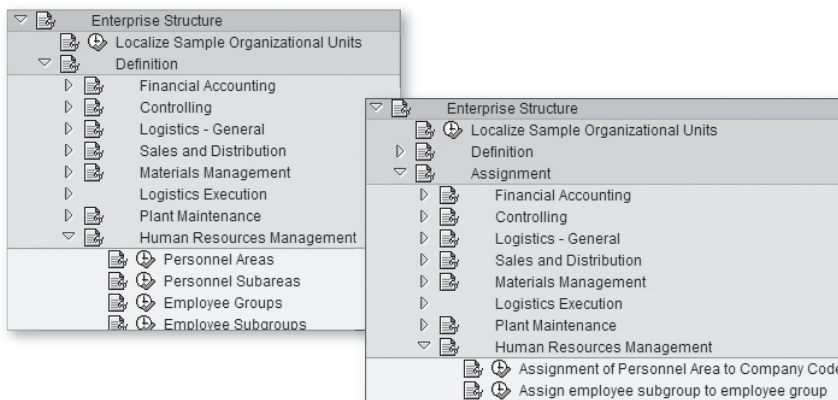


Figure 5.2 Configuration of the HR Enterprise Structure

Personnel areas are set up in the following area of the IMG: SPRO • ENTERPRISE STRUCTURE • DEFINITION • HUMAN RESOURCES MANAGEMENT.

In Figure 5.3, you can see that for each personnel area, you also need to enter some basic address information.

Personnel areas must be assigned to a company code (you can assign more than one personnel area to the same company code, but a personnel area cannot be assigned to more than one company code). Based on what we've discussed so far, it should be clear that a personnel area can only be assigned to one company code, although you may want to assign multiple personnel areas to the same company code. In the United States, for example, there are different laws in each state, which may lead to the need for different personnel areas. The assignment of personnel areas to company codes is done in the following area of the IMG: SPRO • ENTERPRISE STRUCTURE • ASSIGNMENT • HUMAN RESOURCES MANAGEMENT.

"Personnel Areas": Overview

New Entries

Personnel area	Personnel Area Text	
1000	Hamburg	Hamburg
1100	Berlin	Berlin
1200	Dresden	Dresden
1300	Frankfurt	Frankfurt

Personnel Areas

House number/street: Alsterweg 34

PO Box:

Postal Code: 20038

City: Hamburg

Country Key: DE

Region: 02

County code:

City code:

Figure 5.3 Personnel Areas

5.2.2 Employee Groups and SubGroups

Employees can be split into employee groups, usually on the basis of their relationship with their employer, but also based on how they are paid or on their contract status (employees, contractors, retired, etc.). Because you must have personnel data for all people being paid, most companies have to maintain data for former employees who still receive funds from the payroll.

For each employee group, you can set up default values and report on your selections. You can also further divide up the employees into subgroups. When we look further into the configuration, you'll see that some configuration settings can be made by subgroups, a functionality that has great value.

Employee groups and subgroups are completed in the following area of the IMG: SPRO • ENTERPRISE STRUCTURE • DEFINITION • HUMAN RESOURCES MANAGEMENT. Assignment of employees and subgroups are completed in the following area of the IMG: SPRO • ENTERPRISE STRUCTURE • ASSIGNMENT • HUMAN RESOURCES MANAGEMENT.

5.2.3 Payroll Area

As we discussed previously, separating employees into payroll groups requires setting up payroll areas, which controls when these employees are paid. In reality, a payroll function often requires running more than one payroll; for example,

pensioners may have to be run separately and therefore have a different payment date.

Note
To make things easier, SAP ERP recommends setting up only those payroll areas that are absolutely necessary.

Define the payroll area in the following area of the IMG: SPRO • PERSONNEL MANAGEMENT • PERSONNEL ADMINISTRATION • ORGANIZATIONAL DATA • ORGANIZATIONAL ASSIGNMENT • CREATE PAYROLL AREA. Figure 5.4 shows the screen for setting up new payroll areas; make sure you select the PAYROLL FOR PA checkbox, which confirms that the payroll area is relevant for paying people.

Payroll area	Payroll area text	Payroll for PA
\$F		<input checked="" type="checkbox"/>
00	HR-D: Sal. employees	<input checked="" type="checkbox"/>
01	HR-D: Sal. employees	<input checked="" type="checkbox"/>
02	HR-D: Sal. employees	<input checked="" type="checkbox"/>
0V	Monthly Payroll VE	<input checked="" type="checkbox"/>
10	HR-D: Sal. employees	<input checked="" type="checkbox"/>
1V	Weekly Payroll VE	<input checked="" type="checkbox"/>
20	HR-D: Sal. employees	<input checked="" type="checkbox"/>

Figure 5.4 Payroll Area

5.2.4 Payroll Control Record

The payroll control record controls the actually running of the payroll and retains an audit trail detailing when a payroll is run and which users are processing it. This is a very different concept from what we are used to seeing in the Financials areas; after the payroll run begins, the control record locks all personnel numbers, preventing any changes from being made to those records. When the process is complete and you have exited Payroll, the record is updated accordingly and releases the master records. If you want to see who last changed the payroll record, this is visible by looking at the record.

In Section 5.1.2, Payroll, we briefly discussed the three stages of the payroll process: the prerequisite stage (when the payroll area is released for the payroll run), the payroll run, and exiting Payroll. Looking at this from a payroll control record point of review, the following is what happens in each stage:

► **Prerequisite stage**

The control record is updated.

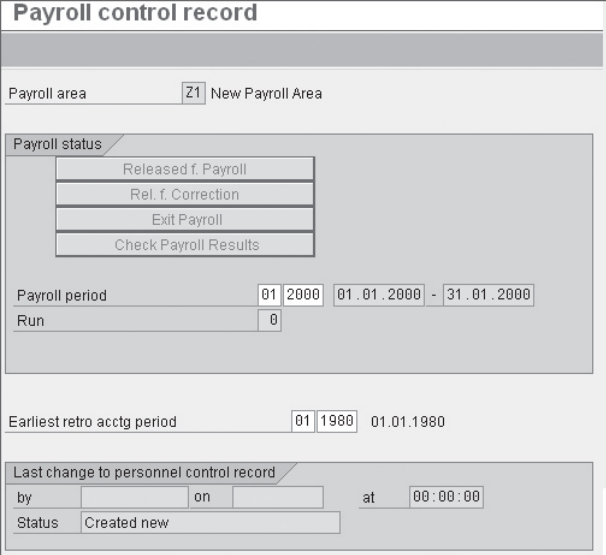
► **Run payroll**

The control record locks all data involved. The payroll run is checked to ensure that it is complete and accurate, and then the status to Check Payroll Results is changed manually. If necessary, a corrective run is performed.

► **Exit payroll**

The control records are released for processing.

This process is set up in the following area of the IMG: SPRO • PERSONNEL MANAGEMENT • PERSONNEL ADMINISTRATION • ORGANIZATIONAL DATA • ORGANIZATIONAL ASSIGNMENT • CREATE CONTROL RECORD. Figure 5.5 shows an example of a control record set up in the system.



Payroll control record

Payroll area New Payroll Area

Payroll status

Released f. Payroll
 Rel. f. Correction
 Exit Payroll
 Check Payroll Results

Payroll period -

Run

Earliest retro acctg period

Last change to personnel control record

by on at

Status

Figure 5.5 Payroll Control Record

5.2.5 Payroll Calendar

Each company defines a *payroll calendar* that informs the pay dates for the year ahead. This could be a paper exercise, but you can also define a payroll calendar in the system and then use this calendar to automatically drive the payroll activities.

In practice, most companies tend to define the calendar and the payroll periods so that the Payroll Driver program can complete its calculation, but they still manually start the payroll process. In this discussion, we look at the configuration of several important elements that contribute to the payroll calendar.

You can access the payroll calendar (Figure 5.6) via the SAP Easy Access menu: HUMAN RESOURCES • PAYROLL • <YOUR COUNTRY> • TOOLS • PAYROLL CALENDAR.

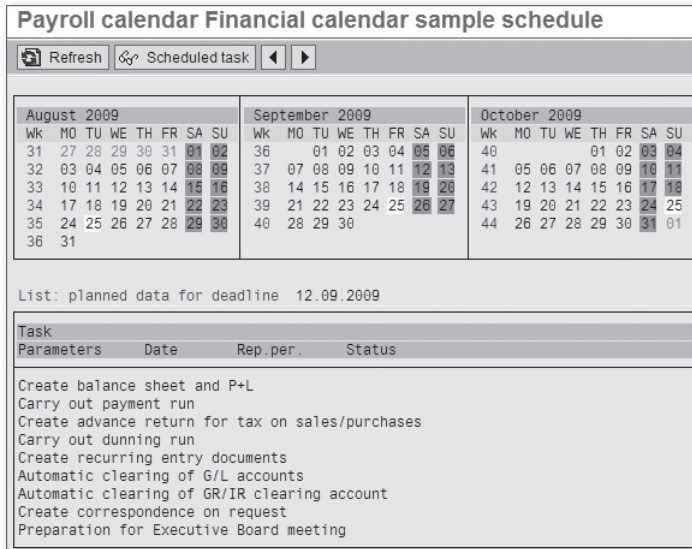


Figure 5.6 Example of a Payroll Calendar

You can view the calendar and also define job scheduling. Job scheduling is configured in the following area of the IMG: SPRO • PAYROLL • (COUNTRY) • PAYROLL CALENDAR • DEFINE SCHEDULE FOR PAYROLL CALENDAR. As you can see from Figure 5.7, this is a fairly straightforward piece of configuration.

You must assign a factory calendar and a holiday calendar to decide working days. The specific dates for the start and end of each payroll period are defined by the period parameters in the following area of the IMG: SPRO • PAYROLL • (COUNTRY) • BASIC SETTINGS • PAYROLL ORGANIZATION • DEFINE PERIOD MODIFIERS. Figure 5.8 shows a number of period parameters, which is common in large complex organizations.

Change View "FI Financial Calendar - Person Responsible for Unit"

New Entries

Schedule: SAP
Name: Financial calendar sample schedule

Organizational unit
Organization object:
Dependent units:

Calendar
Factory Cal. ID: 01
Holiday Cal. ID: 08

Figure 5.7 Setting Up a New Payroll Calendar

Change View "Period Parameters": Overview

New Entries

Period Parameters	Name	Time unit	Start Date
01	Monthly	01	01.01.1999
02	Semi-monthly	02	01.01.2000
03	Weekly	03	01.01.1990
04	Bi-weekly	04	01.01.1990
05	Every 4 weeks	05	01.01.1990
06	Annually	06	01.01.1990
07	Weekly DE	03	01.01.1998
10	Quarterly	07	01.01.2000
11	Monthly	01	01.01.1990

Figure 5.8 Payroll Period Parameters

The actual pay date needs to be defined within each payroll period. As we mentioned earlier, there can be more than one pay date in a month for each payroll run; this is shown in the example in Figure 5.9. These dates are configured as date modifiers in the following area of the IMG: SPRO • PAYROLL • (COUNTRY) • BASIC SETTINGS • PAYROLL ORGANIZATION • DEFINE DATE MODIFIERS.

Change View "Date Modifiers": Overview

New Entries

Date modifier	Name
00	Standard modifier
21	21st of the month
22	22nd of the month
23	23rd of the month
24	24th of the month
25	25th of the month
26	26th of the month
27	27th of the month

Figure 5.9 Setting Up Date Modifiers

5.2.6 Organizational Structure

The central component in SAP ERP HCM is the organizational structure (org structure), which, as we mentioned, shows the relationships that different employees have within the organization and with each other. This is set up in a hierarchy structure, which should reflect the actual situation in the organization. After you understand the functions of the org structure, you will know which relationships can and cannot be set up. You define your org structure within the SAP Easy Access menu: HUMAN RESOURCES • ORGANIZATIONAL MANAGEMENT • ORGANIZATIONAL PLAN • ORGANIZATION AND STAFFING.

Figure 5.10 shows an example of an org structure. We saw this information earlier in the chapter, but we revisit it now to remind you what you're working with. After the structure is set up, you need to make sure it is always current because it drives many HR processes.

Staff Assignments (Structure)	ID	Chief
[-] IDES AG	O 00000001	
[-] IDES New Zealand Company	O 50003514	Managing Director
[-] Compañía Modelo CO	O 50003776	Director General
[-] Exec.directory - Germany	O 00000100	Dr. Herbert Braunstein
[-] Executive Board - Italy	O 00000220	
[-] IDES Nederland	O 50002925	
[-] Executive Board - USA	O 00000300	Mrs Debbie Davis
[-] Chief Executive Officer (US)	S 49999998	
[-] Mrs Debbie Davis	P 00100135	
[-] Executive Assistant to CEO (US)	S 49999999	
[-] Operations - (US)	O 50000590	Mr. John Williams
[-] Chief Operating Officer - (US)	S 50000046	
[-] Executive Assistant to COO (US)	S 50000047	
[-] Mrs Barbara Kent	P 00100113	
[-] Operations (US)	O 50028929	
[-] Vice President Operations (US)	S 50000050	
[-] Mr. Jonathan Tyler	P 00100115	
[-] Hospitality (US)	O 50028893	
[-] Best Restaurant	O 50028894	
[-] Production - (US)	O 50000600	Mr. Timothy Hayes
[-] Director of Production	S 50011133	
[-] Admin. Production	S 50011134	
[-] New York Production Site	O 00003000	Mr. John Martin
[-] Assembly Worker	S 50011147	
[-] Mrs Victoria Gonzales	P 00100038	
[-] Production Manager	S 50011148	
[-] Assembly Worker	S 50011149	

Figure 5.10 Example of an HR Organizational Structure

5.3 Employee Master Record

The basic master data object in the SAP ERP HCM component is the employee master record, which must contain a significant amount of information to handle

the diverse range of its subprocesses. As you'll recall from discussions in earlier chapters, material master records have a number of screens to store information; similarly, employee information is grouped together in *infotypes*, which is just another way of saying "screens" or "tabs." Although there are many infotypes (both standard and customized), our main focus in this chapter is integration with the payroll process, so we focus only on infotypes related to this subject.

Note

When you start storing personal employee data, there are strict rules about what certain people can and cannot see. In a support environment, analysts and consultants are usually able to see most master data; however, this doesn't usually apply to personal data.

SAP ERP uses personnel actions to control certain standard HR processes, such as when an employee is hired or leaves. For each action, the system can be advised as to the sequence in which data needs to be accessed or processed to ensure consistency and completeness in processing. In this section, we highlight the key infotypes in the payroll process. We restrict our discussion to generic infotypes related to integration with SAP ERP Financials; consult your local statutory settings to understand whether any local variations are applicable. Infotype configuration is completed in the following area of the IMG: SPRO • PERSONNEL MANAGEMENT • PERSONNEL ADMINISTRATION • CUSTOMIZING PROCEDURES • INFOTYPES.

When you first look at an employee's master record, you will see the screen shown in Figure 5.11. This shows all of the active infotypes (these have been ticked) and is accessed by Transaction PA30.

The screenshot displays the SAP 'Maintain HR Master Data' interface. At the top, the title is 'Maintain HR Master Data'. Below the title bar, there are navigation icons and a search bar. The main area is divided into several sections:

- Personnel Data:** Personnel No. 99901, Contract 00099001 Development Director Bus.
- Name:** Mr. Azam Arif MBA, Philadelphia.
- Status:** Active, Salaried staff, Philadelphia.
- Employment:** US:Semi-Monthly - US, SSN [242-34-3444].
- Tabs:** Core Employee Info., Empl. contract data, Gross/net payroll, Net payroll.
- Infotype List:** A list of infotypes with checkboxes:
 - Infotype text [E]
 - Actions []
 - Organizational Assignment [x]
 - Personal Data [x]
 - Addresses [x]
 - Bank Details [x]
 - Family Member/Dependents []
 - Challenge []
 - Internal Medical Service []
 - Maternity Protection/Parental Leave []
- Period Selection:**
 - Radio button selected for 'Period'.
 - From: [] To: []
 - Options: Today, Curr.week, All, Current month, From curr.date, Last week, To Current Date, Last month, Current Period, Current Year.
 - Choose button.

Figure 5.11 Maintain Employee Master Record

You can access all employee information from this front page. Select an infotype, and then click the CREATE/CHANGE/DISPLAY icons at the top of the screen.

Next we discuss the most important infotypes in detail. We have selected these infotypes carefully because you need to be aware of all of these infotypes to fully understand the payroll process.

5.3.1 Infotype 0000: Actions

The Actions infotype (Figure 5.12) is the first that we are concerned with because it records the actions an employee is involved in, starting with their hire. The business processes that an employee goes through during his entire career with the company are recorded in this infotype. It also records internal actions, such as performance appraisals and disciplinary actions.

Display Actions				
Pers.No.	99001	Pers.Assgn	00099001 Development Director Bus	
Name	Mr. Azam Arif MBA		SSN	242-34-3444
	Philadelphia		Active	
	Philadelphia		Salaried staff	US:Semi-Monthly - US
Start	01.01.2000	to	31.12.9999	Chng
Personnel action				
Action Type	Hire			
Reason for Action				
Status				
Customer-specific				
Employment	Active			
Special payment	Standard wage type			
Organizational assignment				
Position	40000000	Development Director Busi		
Personnel area	3500	Philadelphia		
Employee group	1	Active		
Employee subgroup	U4	Salaried staff		
Additional actions				
Start Date	Act.	Action Type	ActR	Reason for acti
01.01.2000	01	Hire		

Figure 5.12 IT0000 - Employee Actions

One common use for the Action infotype is to record when an employee moves departments, which can affect retrospective postings (which we discussed earlier).

5.3.2 Infotype 0001: Organizational Assignment

The Organizational Assignment infotype (Figure 5.13) is key because it drives a number of processes and can also influence transaction code access (if you use structural authorizations) for an employee. In simple terms, it records where an employee exists in the organization. Looking at Figure 5.13, you can see a number of the concepts we have mentioned come into play.

Display Organizational Assignment			
Org Structure			
Pers. No.	99001	Pers. Assgn	00099001 00099001 Development I
Name	Mr. Azam Arif MBA	SSN	242-34-3444
	Philadelphia		Active
	Philadelphia		Salaried staff
			US:Semi-Monthly - US
Start	01.01.2000	to	31.12.9999
		Chng	01.08.2001 BONIN
Enterprise structure			
CoCode	3000	IDES US INC	Leg.person
Pers.area	3500	Philadelphia	Subarea
			0001 Philadelphia
Cost Ctr			Bus. Area
Personnel structure			
EE group	1	Active	Payr.area
			US US:Semi-Monthly - US
EE subgroup	U4	Salaried staff	Contract
Organizational plan			
Percentage	100.00		
Position	40000000	DD BApp	
		Development Director B	
Job key	40000000	DD BApp	
		Development Director B	
Exempt	<input type="checkbox"/>		
Org. Unit	40000002	BApp Develop	
		Business Applications I	
Org.key	3500		
Administrator			
		PersAdmin	<input type="checkbox"/>
		Time	<input type="checkbox"/>
		PayrAdmin	<input type="checkbox"/>

Figure 5.13 IT0001 - Organizational Assignment

If you look at the information in the header, you can see the basic information is recorded in relation to where this particular employee sits in the enterprise.

5.3.3 Infotype 0002: Personal Details

This infotype contains the personal data for an employee (Figure 5.14), such as time with the company and the different roles he has had within the company. It also holds basic information about marital status and dependents because this information may be relevant for payroll deductions.

Personal Data			
Pers. No.	99001	Pers.Assgn	00099001 Development Director Bu
Name	Mr. Azam Arif MBA	SSN	242-34-3444
	Philadelphia	Active	
	Philadelphia	Salaried staff	US:Semi-Monthly - US
Start	01.05.2010	To	31.12.9999
Name			
Title	Mr.	Name Format	
Last name	Arif	Birth name	
First name	Azam	Second name	
Middle name	Mohammed	Initials	
Second title	MBA	Nickname	
Suffix			
Name	Mr. Azam Arif MBA		
HR data			
SSN	242343444	Gender	<input type="radio"/> Female <input checked="" type="radio"/> Male <input type="radio"/> TBD
Birth date	12.10.1960		
Language	English		
Nationality	British	Other nat.	
Mar. Status	Marr. Since	No. child.	

Figure 5.14 IT0002 - Personal Data

If you click the OVERVIEW button on this record, you can see the changes in this employee's history with the company.

5.3.4 Infotype 0006: Address

The Address infotype (Figure 5.15) holds information about an employee's address and contact details. This information may be required to send out correspondence for this person.

Change Addresses

Pers. No. 99001 Pers. Assgn 00099001 Development Director Bu

Name Mr. Azam Arif MBA SSN 242-34-3444

Philadelphia Active
Philadelphia Salaried staff US:Semi-Monthly - US

Start 01.01.2000 to 31.12.9999 Chng 22.12.2000 JOSWI6T

Address

Address type Permanent residence

c/o

Address line 1 342 Houston Avenue

Address line 2

City/country Philadelphia

State/zip code Pennsylvania 19118

Country Key United States

Telephone Number

Communications

Type	Number	Extension

Figure 5.15 IT0006 - Employee Address

5.3.5 Infotype 0007: Planned Working Time

The Planned Working Time infotype (Figure 5.16) stores information about an employee's normal working hours. This information is relevant for work scheduling (which we don't cover in this chapter) and also for time recording (which we talk about later). Figure 5.16 shows the details contained on this screen.

5.3.6 Infotype 0008: Basic Pay

The main purpose of this infotype is to collect all of the elements that make up this employee's basic pay. These are represented in SAP ERP as wage types and are important configurable objects that we discuss in more detail later in this chapter.

Looking at the example in Figure 5.17, you can see three wage types for this employee: basic pay, bonuses, and premiums. This information helps the Payroll Driver program calculate a person's pay.

Planned Working Time

Work schedule

Pers. No. 99001 Pers.Assgn 00099001 Development Director Bu

Name Mr. Azam Arif MBA SSN 242-34-3444

Philadelphia Active
Philadelphia Salaried staff US:Semi-Monthly - US

Start 01.01.2000 To 31.12.9999 Chg. 15.12.2000 BONIN

Work schedule rule

Work schedule rule NORM Normal

Time Mgmt status 0 - No time evaluation

Working week

Part-time employee Additional time ID

Working time

Employment percent 100,00

Daily working hours 7,50

Weekly working hours 37,50

Monthly working hrs 162,50

Annual working hours 1950,00

Weekly workdays 5,00

Figure 5.16 IT0007 - Planned Working Time

Display Basic Pay

Salary amount Payments and deductions

Pers. No. 99001 Pers.Assgn 00099001 Development Director Bu

Name Mr. Azam Arif MBA SSN 242-34-3444

Philadelphia Active
Philadelphia Salaried staff US:Semi-Monthly - US

Start 01.01.2000 to 31.12.9999 Chng 06.04.2009 SAPUSER

Subtype 0 Basic contract

Pay scale

Reason Capacity Util. Level 100,00

PS type 01 Standard contract Work hours/period 81,25 Semi-monthly

PS Area 01 Philadelphia Next increase

PS group GRD01 Level 05 Annual salary 156.000,00 USD

Wa	Wage Type Long Text	O	Amount	Curr.	I	A	Number/Unit	Unit
1002	Salary		6.500,00	USD		<input checked="" type="checkbox"/>	0,00	
1004	Lead premium		2.500,00	USD		<input checked="" type="checkbox"/>	0,00	
990N	Total Bonus for MSS		1.500,00	USD		<input checked="" type="checkbox"/>	0,00	

Figure 5.17 IT0008 - Basic Pay

You can find specific information about this person's salary and deductions by clicking the SALARY AMOUNT and PAYMENTS AND DEDUCTIONS buttons at the top of the screen. Figures 5.18 and 5.19 show the details contained on these screens.

Payments and Deductions						
PerNo	Name	Activity	PT	PA	PS	Group PL
Infotyp	Subtyp		Ob	Start Date	End Date	
Reas.						
W. type	Amount	Curr	D	Number	Unit	%difference
00099001	Mr. Azam Arif MBA	Development Dir	01	01	GRD01	05
0008	Basic Pay	0	Basic contract		01.01.2000-31.12.9999	
1002	Salary	6.500,00	USD	0,00	0,00	
1004	Lead premium	2.500,00	USD	0,00	0,00	
9B0N	Total Bonus for MSS	1.500,00	USD	0,00	0,00	
****	Total	10.500,00	USD	0,00	0,00	
0014	Recurring Payments/Deductions	1122			01.01.2000-31.12.9999	
1122	Car allowance	750,00	USD	0,00	0,00	

Figure 5.18 Payments and Deductions

Salary per Period (in USD)	
Annual salary	156.000,00
Salary/monthly	13.000,00
Semi-monthly salary	6.500,00
Salary/every 14 days	6.000,00
Wage/weekly	3.000,00
Salary/hourly	80,00

Figure 5.19 Salary Amount

5.3.7 Infotype 0009: Bank Details

In the BANK DETAILS infotype screen, you see how an employee is to be paid; for example, in Figure 5.20, the employee is being paid by bank transfer. The payment method here is the same payment method defined in SAP ERP Financials. We recommend that you set up payroll-specific payment methods because this allows easy visibility and control over the different types of payment. For more information about this, see Chapter 4, Section 4.9.5.

Bank Details			
Pers. No.	99001	Pers.Assgn	00099001 Development Director Bu
Name	Mr. Azam Arif MBA	SSN	242-34-3444
Philadelphia	Active		
Philadelphia	Salaried staff	US:Semi-Monthly - US	
Start	01.01.2000	to	31.12.9999 Chng 15.12.2000 BONIN
Bank details			
Bank details type	Main bank		
Payee	Mr. Azam Arif MBA		
Postal Code/City	19118	Philadelphia	
Bank Country	United States		
Bank Key	123123123	Citibank	
Bank Account	2323221101	Bank control key	01
Payment method	T Bank transfer		
Purpose			
Payment currency	USD		

Figure 5.20 IT0009 - Employee Bank Details

5.3.8 Infotype 0014: Recurring Payments and Deductions

For every employee, there are a number of possibilities in terms of recurring payments and deductions that need to be subtracted from their salary. These can be for different things, such as union membership or a loan repayment. Figure 5.21 shows an example.

Pers. No.	99001	Pers.Assgn	00099001 00099001 Development I
Name	Mr. Azam Arif MBA	SSN	242-34-3444
Philadelphia	Active		
Philadelphia	Salaried staff	US:Semi-Monthly - US	
Start	01.01.2000	to	31.12.9999 Chng 06.04.2009 SAPUSER
Recurring Payments/Deductions			
Wage Type	1122	Car allowance	
Amount	750,00	USD	
Number/unit	0,00		
Assignment Number			
Reason for Change			
Payment dates			
Payment model			
1st payment period	00	or	1st payment date
Interval in periods	00	Interval/Unit	0

Figure 5.21 IT0014 - Pay Deduction

Again, clicking on the OVERVIEW button shows all of the deductions that are set up for this employee, as shown in Figure 5.22.

The screenshot shows the SAP 'Overview Recurring Payments/Deductions' interface. At the top, the title is 'Overview Recurring Payments/Deductions'. Below the title, there are navigation icons and a search bar. The main area contains a form with the following fields:

- Pers. No.: 99001
- Pers. Assgn: 00099001 00099001 Development I
- Name: Mr. Azam Arif MBA
- SSN: 242-34-3444
- Location: Philadelphia
- Status: Active
- Employment Type: Philadelphia Salaried staff
- Pay System: US:Semi-Monthly - US
- Start Date: 01.01.2000
- End Date: 31.12.9999
- STY.: []

Below the form is a table with the following columns: Wage type, Wage Type Long Text, From, To, O, Amount, and Crcy. The table contains one row of data:

Wage type	Wage Type Long Text	From	To	O	Amount	Crcy
1122	Car allowance	01.01.2000	31.12.9999		750,00	USD

Figure 5.22 Overview of Recurring Payments/Deductions

For each of these deductions, the system allows you to set up limits for how much the deduction could be. These rules can be set up specifically for a group of employees and can vary from group to group.

5.3.9 Infotype 0016: Contract Elements

The details of employees contracts are stored in infotype 16. This infotype contains information such as the employee's contract type and any sick pay circumstances. This is also where you define the employee's and employer's notice periods.

5.3.10 Infotype 0027: Cost Distribution

An employee's costs may need to be assigned somewhere other than the cost center that is assigned to that employee. In this example, we have an employee who is spending time working on two specific projects. We could use the timesheet function to recharge costs from this employee's home cost center to the projects, but this would require a timesheet to be completed. Instead, this employee's time is simply recharged at a flat rate. We charge 10% and 25% of their costs to the two internal orders, as shown in Figure 5.23.

Cost Distribution						
Org. Management info						
Pers. No.	99001	Pers. Assgn	00099001 Development Director Bu			
Name	Mr. Azam Arif MBA		SSN	242-34-3444		
Philadelphia		Active				
Philadelphia		Salaried staff		US:Semi-Monthly - US		
Start	01.01.2000	To	31.12.9999	Chng	06.04.2009	SAPUSER
Distrib.	02	Travel expenses				
Master cost center						
Cost distribution						
Co.	Cost ctr	Order	WBS element	Name	Pct	Name of aux. account
3000		100011		R&D: CCMA	10,00	
3000	1220	1000000		Motor Pool	25,00	R&D - GRC

Figure 5.23 IT0027 - Cost Distribution for This Employee

The same can be done to recharge costs to WBS or to cost centers directly.

5.3.11 Infotypes 0207 and 0209: US-Specific Infotypes

U.S. tax code is different from other countries in that the tax is defined at the state level. For this reason, U.S. payroll systems use infotype 207 to record your resident data and thus which laws are applicable to you. All are subject to federal tax, but it is also necessary to deal with state tax.

Should an employee work in different states, some of their time may be subject to different state taxes. In this scenario, infotype 207 can be used to define allocations. You should also fill in infotype 209 to reflect an employee's unemployment state.

5.3.12 Infotype 2010: Employee Remuneration

Some U.S. implementations use this infotype to load up specific payment data for employees who may be working few or odd hours and thus do not fit into the general working of the rest of the organization, for example, ad hoc cleaners or drivers who are paid on a job-by-job basis. Figure 5.24 shows an example of someone who is called in to clean up hazardous waste; because this is done on an ad hoc basis, it's difficult to set up a regular payment scheme.

Employee Remuneration Info			
Personal work schedule		Activity allocation	Cost assignment
External services			
Pers. No.	99001	Pers. Assgn	00099001 Development Director Bu
Pers.No.	99001	Mr. Azam Arif MBA	
Philadelphia	Active	WkSchdl	NORM
Philadelphia	Salaried staff	SSN	242-34-3444
Date	01.01.2009	Chg.	06.04.2009 SAPUSER
Remuneration info			
Wage type	1298	Hazardous Duty Bonus	
Number of hours			
Number/unit			
Amount	2.000,00		
Currency	USD		
Extra pay/valuation			
Pay scale group/level			
Position/work center			
Overtime comp. type	Depends on wage type		
Premium			
Premium Indicator			
Tax area record type			
External document number			

Figure 5.24 IT2010 - Employee Remuneration

If this sounds useful in your line of work, you can find more information from a dedicated U.S. payroll resource.

5.4 Configuration and Design of Payroll

The payroll process in SAP ERP depends on the configuration of the Payroll components of both SAP ERP HCM and SAP ERP Financials, as well as the setup of the employee master records in the system. In Section 5.1.2, Payroll, we talked about the basic payroll process, central to which is the Payroll Driver. This is basically the program that calculates and eventually posts the payroll results; it is dependent on the rules that we specify in the payroll schema.

In this section, we look at the configuration and design of Payroll, starting in HR and ending up in SAP ERP Financials. The following lists the areas we will cover:

- ▶ Wage types
- ▶ Symbolic accounts
- ▶ Account determination
- ▶ Vendor/customer account determination
- ▶ Payroll posting to Financial Accounting (FI)
- ▶ Payroll posting variants

5.4.1 Payroll Driver

SAP ERP provides a single program to do the payroll run for each country, known as the International Payroll Driver. For each country, the country-specific settings (variants) enable the country-specific rules to be used to calculate final pay correctly. Figure 5.25 shows how the country-specific variants are visible in the SAP Easy Access menu.

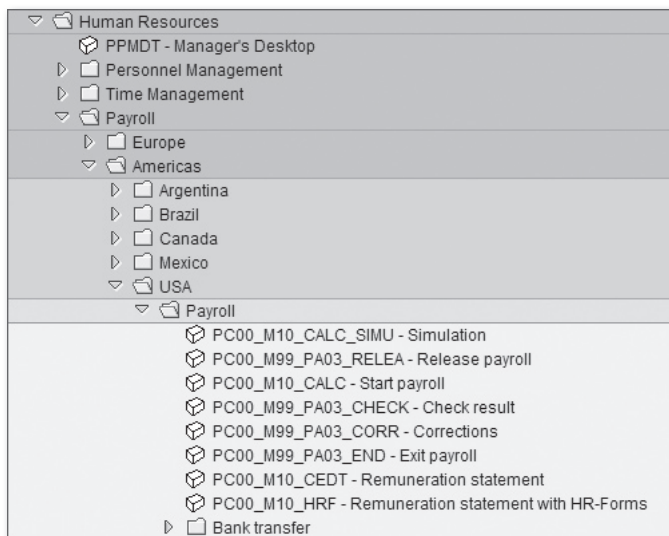


Figure 5.25 Country-Specific Payroll Menus

If you look at Figure 5.26, you can see that the PAYROLL DRIVER is a specific program for different countries, not just a different variant.

Payroll Driver (USA)

Repository data

Transaction	PC00_M10_CALC
Program	RPCALCU0
Program (screen)	RPCALCU0
Screen number	1000
Program (GUI)	RSSYSTDB
GUI status	%_00

Payroll Calculation Driver for Great Britain

Repository data

Transaction	PC00_M08_CALC
Program	RPCALCG0
Program (screen)	RPCALCG0
Screen number	1000
Program (GUI)	RSSYSTDB
GUI status	%_00

Figure 5.26 Country-Specific Payroll Drivers

The Payroll Driver can be run in simulation mode, which is always a good idea because it allows you to see if there are any errors. You can select which records to include in the run; the usual option is to run payroll by payroll area. If you have a specific issue with a selection of employee records, you can run payroll for that selection, as long as they are within the same payroll area. After you run the Payroll Driver, you will see a log produced to explain the results (Figure 5.27). Within the log, you get confirmation of successful processing, as well an indication of errors.

To run payroll, you have to specify the schema that you want to use to calculate the results. We discuss payroll schemas next.

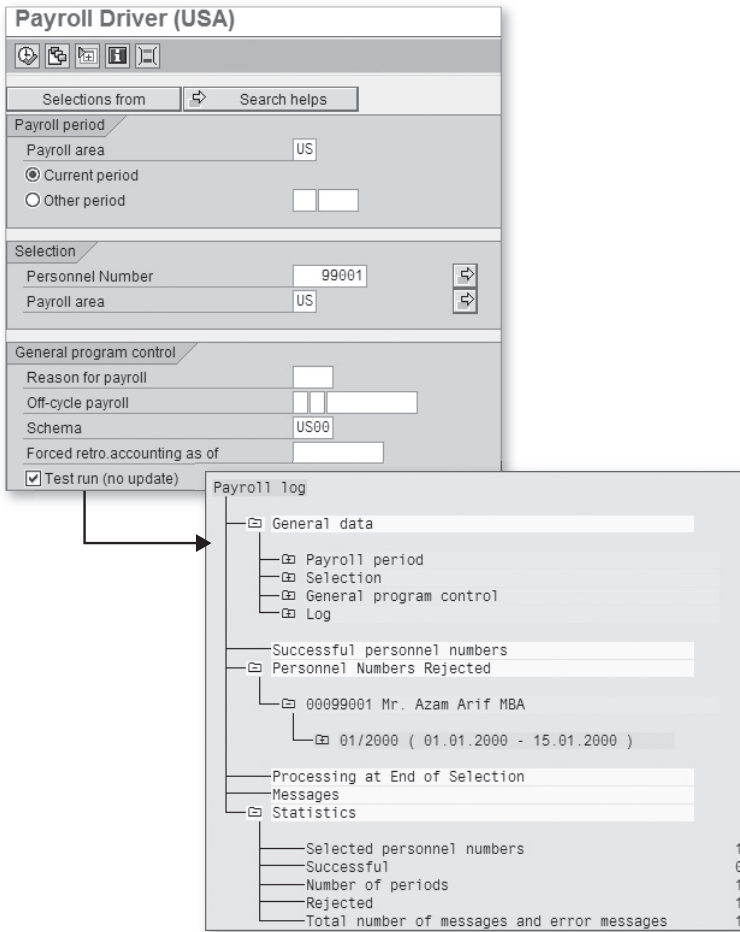


Figure 5.27 Payroll Results

5.4.2 Payroll Schema

In simple terms, a schema is a set of rules that determine how the payroll is calculated. It takes the program through a logical route to calculate results, taking into account the required statutory rules. SAP ERP comes loaded with a number

of country-specific payroll schemas, but you will probably need to configure some elements of this to meet local company-specific requirements. Within a schema, you also find subschemas, which deal with the specific functionality and include the detailed rules.

In the previous section, we looked at a number of infotypes, many of which affect the final pay figure. The payroll schema controls how all this information is brought together and the order in which the information is accessed to ensure that the figure you end up with is correct. For example, determining how much tax is to be paid should be made after you've determined the total amount of basic pay, not before.

To see what's in the payroll schema, you can use Transactions PE01 and PE02. A deeper discussion of this topic goes beyond the scope of this book, but if this is important to your line of work, you should review these transactions to understand how payroll schemas are set up.

5.4.3 Wage Types

The wage type is where you actually determine the value or rate of an element of pay or deduction. There are wage types for all sorts of things, including basic pay, deductions, and bonuses. Standard SAP ERP systems are supplied with a complete list of standard wage types (contained in the Wage Type Catalogue), but you can also configure your own and therefore replicate any specific requirements you have within your organization. For example, you may have a specific bonus scheme or deduction requirement that is not reflected in the standard SAP ERP-supplied wage types.

Wage types reflect an important configuration step in the automatic account determination for payroll posting to SAP General Ledger. As you will see in the next sections, the combination of wage types and symbolic accounts is used to assign general ledger accounts to payroll postings. For this book, it's only important to understand what a wage type is and what it's used for, so we don't provide detailed explanations of the payroll rules and regulations.

Wage types are set up in different areas of the IMG; the menu paths shown in the following section relate to all countries (United States, Great Britain, etc.). SAP ERP provides specific IMG menu paths for each country, so you can configure your country-specific settings as required.

Types of Wage Types

There are three types of wage types in the system:

- ▶ Wage types entered directly into an employee's record in an infotype
- ▶ Wage types calculated in the background, as a result of configuration
- ▶ Wage types automatically generated during processing

Some of these are apparent by looking at infotype 0008, Basic Pay, but they can also be found elsewhere on the employee's master record. Deductions and bonuses are also wage types and are found on other infotypes (e.g., 0014, Recurring Payments/Deductions).

When setting up wage types, the configuration is done in the following area of the IMG: SPRO • PERSONNEL MANAGEMENT • PERSONNEL ADMINISTRATION • CUSTOMIZING PROCEDURES • INFOTYPES. After you access this area, there are different places for you to actually configure the wage type, depending on its type.

5.4.4 Symbolic Accounts

The main purpose of the symbolic account is to define the account assignment category, in other words, to define what SAP ERP Financials account assignment object must be supplied when making a posting. For example, for salary postings, we expect the posting to go to an expense account, and the standard object should be a cost center. In general, expenses require cost objects, and balance sheet postings require profit centers. Symbolic accounts are set up in the following area of the IMG: IMG • PAYROLL • PAYROLL GB • REPORTING FOR POSTING PAYROLL RESULTS TO ACCOUNTING • ACTIVITIES IN THE HR SYSTEM • EMPLOYEE GROUPING/SYMBOLIC ACCOUNT • DEFINE SYMBOLIC ACCOUNTS.

Note

It's important to understand the fundamentals of the SAP ERP Financials solution before completing this configuration activity. In general, we would make use of balance sheet codes (requiring a profit center) and expense codes (requiring a cost center), but this is an important integration step in this area of configuration, and you should ensure this configuration conforms to the Financials settings.

Figure 5.28 shows how we set up the account assignment category for each symbolic account. In this scenario, we set up a number of symbolic accounts, one per wage type. You don't have to do this, but as you'll see in the next section, it influ-

ences the account determination. Other options on this screen that you may select include the following:

- ▶ **MOMAG**
This setting enables account determination according to the employee grouping account determination.
- ▶ **FIXED MOMAG**
This setting is relevant for FM/GM-based (Funds Management/Grants Management) account determination.
- ▶ **NEGATIVE POSTING indicator**
This indicator enables negative postings to be made when making reversal postings. (Note: This should be reviewed in detail before being ticked.)

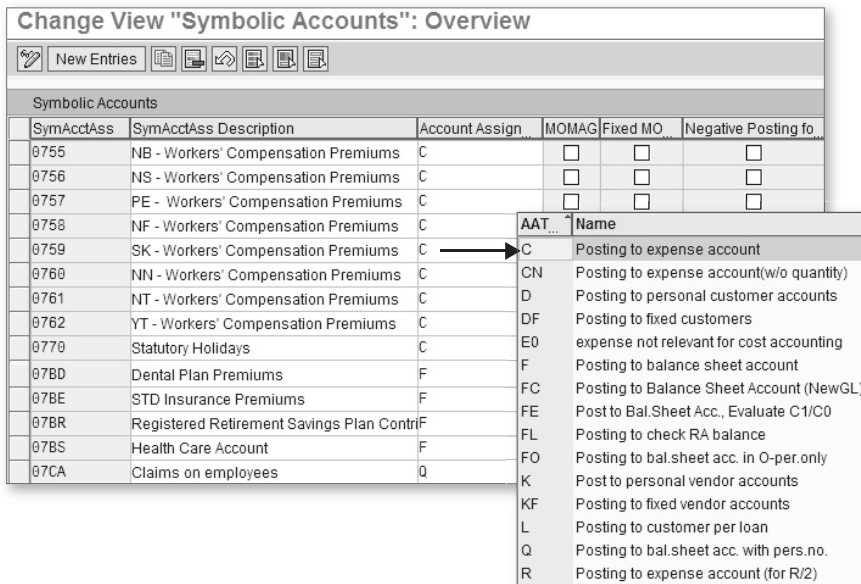


Figure 5.28 Symbolic Account Settings

Now that you've defined the symbolic accounts, you can link the wage type to a symbolic account using the following area of the IMG: IMG • PAYROLL • PAYROLL GB • REPORTING FOR POSTING PAYROLL RESULTS TO ACCOUNTING • ACTIVITIES IN THE HR SYSTEM • MAINTAIN WAGE TYPES • DEFINE POSTING CHARACTERISTICS OF THE WAGE TYPE.

Looking at Figure 5.29, you can see that in this configuration step, you set up posting settings for each wage type. Specifically, you indicate which symbolic account is relevant (in terms of account assignment), and also how the debits and credits are posted. As we said before, you can link multiple wage types to the same symbolic account.

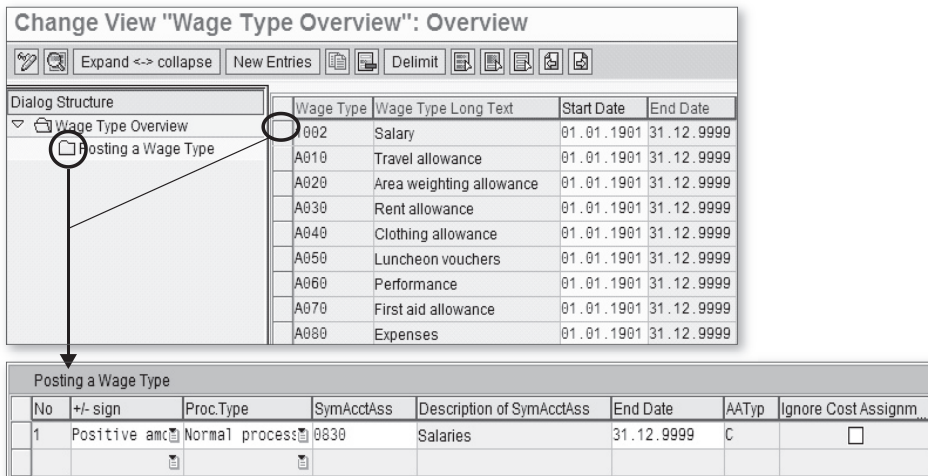


Figure 5.29 Linking Wage Type to Symbolic Account

The HR team usually completes this configuration activity because you are linking two HR objects together. This configuration shouldn't be done in isolation; be sure to think about the range of general ledger accounts you will eventually want to post to. Figuring this out now will make the next configuration activity easier.

Note
 The setup of employee grouping specifically in relation to account determination is not the same as the employee groups we discussed at the start of this chapter (Section 5.2.2, Employee Groups and Subgroups).

5.4.5 Account Determination

At this point, you need to define the account determination rules at the chart of accounts level. This configuration is consistent with the settings we've already made for the MM-FI account determination, so if you've covered this section, you'll recognize the look of the screens.

Note
 This element of SAP ERP HCM configuration is consistent for every country, so you don't need to worry about country-specific settings here.

Access the following area of the IMG: IMG • PAYROLL • PAYROLL GB • REPORTING FOR POSTING PAYROLL RESULTS TO ACCOUNTING • ACTIVITIES IN THE AC SYSTEM • ASSIGN ACCOUNTS. As you can see in Figure 5.30, there are a number of configuration options that you need to review and understand.

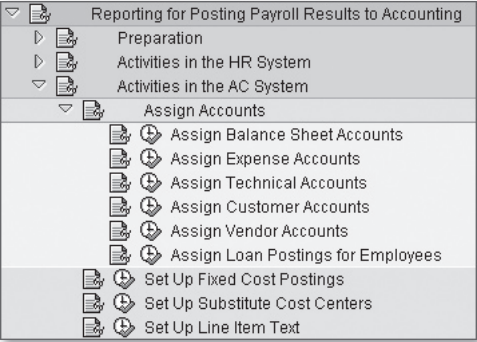


Figure 5.30 Account Determination

You need to understand some basic principles of where you expect postings to go, in terms of when payroll runs and posts to accounting. Payroll consultants usually concern themselves with running payroll and ensuring that payments reach the employees. Financials consultants, however, are very concerned with ensuring the right accounts are picked up. In Table 5.1, we summarize the key concepts for the posting of payroll to the ledger.

Type of Posting	Comment
Salary expense	In HR terms, the cost of employees is referred to as the <i>salary expense</i> . We expect this to be posted to expense general ledger accounts in the P&L. This is a summary posting by the general ledger account.
Vendors	In some circumstances, the employer needs to make deductions from an employee's salary. We make this association through a wage type link with the vendor number through account determination.

Table 5.1 Summary of Key Concepts for Financial Posting of Payroll

Type of Posting	Comment
Expenses	Employees may be eligible to be refunded for any business expenses they incur. The normal route approach here is to configure the SAP Travel Management component, although we do not cover that component in this book.
Customers	If an employee has taken a loan, or you are making an advanced payment to an employee, this needs to be set up by configuring this relationship (not covered in this book).
Technical	This setting is needed for when a payroll run (which could have thousands of lines) needs to post into many general ledger documents (which are limited to 999 lines). This is usually a control account through which all control postings go. A single gross pay control account is common here, or it's possible to set up control accounts by company code.

Table 5.1 Summary of Key Concepts for Financial Posting of Payroll (Cont.)

Let's first look at the expense accounts configuration because this is a good way to understand the other configuration settings. In Figure 5.31, you can see that, in the same way we defined the MM account determination settings, we have a transaction key against which we assign general ledger accounts. The system needs a symbolic account against which to assign a general ledger account, and, as we have seen already, the symbolic account is linked to the wage type. This is where we make the account assignment.

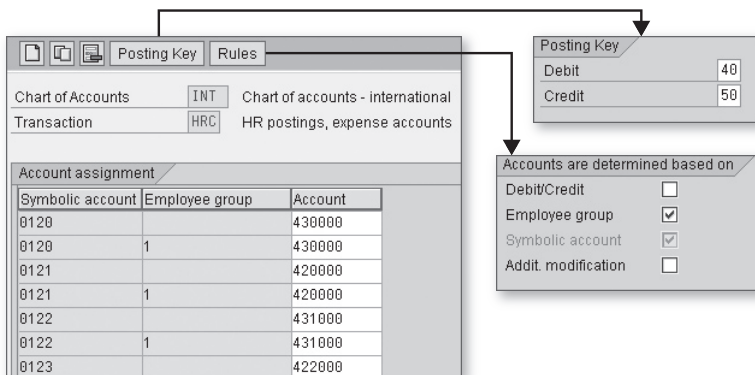


Figure 5.31 Assignment of General Ledger Accounts

When setting up expense postings, you expect to see symbolic accounts that enable the coding of salary, overtime, and perhaps expenses to the relevant general ledger accounts. This table might have a number of entries. You can also include employee groups, which we mentioned in our earlier discussion of symbolic accounts, to differentiate the account assignment for each symbolic account.

5.4.6 Vendor/Customer Account Determination

As part of the payroll process, there is usually a need to make postings against vendors and, sometimes, customers. Perhaps some of your deductions need to be paid to a specific organization on behalf of the employee; for example, sometimes courts order fines that must come out of an employee's salary. In such a situation (see Figure 5.32), if you set up the court as a vendor in your system, you can link the deduction directly to the vendor account and therefore enable Payroll to generate the deduction postings automatically.

Maintain FI Configuration: Automatic Posting - Accounts	
Chart of Accounts	INT Chart of accounts - international
Transaction	HRK HR vendor postings
Account assignment	
Symbolic account	Account
1122	7512

Figure 5.32 Setting Deduction Vendors

5.4.7 Full Payroll Posting to Finance

The previous sections showed how the system determines the Financials postings that need to be made. We do physically need to process the posting-to-accounting activity because it is possible to make payments to employees without doing this step. This is to avoid situations where you're unable to pay employees due to a blocked cost center or some other Financials issue; because this isn't really a valid reason to hold back making the payroll payments to employees, the system segregates these two activities.

The volume of transactions in Payroll is a lot of information for posting to the general ledger, so SAP ERP recommends that the transactions be posted at a summary level (see Section 5.4.8, Payroll Posting Variant). Many organizations adopt

this policy because they don't want the payroll information to be posted at the line level into the general ledger, which makes it too easy to get detailed information about a specific employee's pay. Thus, the general ledger generally contains only a summarized posting per general ledger account and cost object, with the detailed analysis of the employees who make up these figures contained in the payroll details.

Now that everything is configured, it's time to demonstrate a payroll run.

Pers. No.:	109560	Pers.Assgn	00109560 Vice President of Finance																						
Name	Mr. Charlie Finance		SSN	432-22-2123																					
Enterprise structure																									
CoCode	3000	IDES US INC	Leg.person																						
Pers.area	3200	Atlanta	Subarea	0001	Atlanta																				
Cost Ctr	9515	Finance - Group 1	Bus. Area	0001	Business area 0001																				
Personnel structure																									
EE group	1	Active	Payr.area	UM	US.Monthly - UM																				
EE subgroup	U5	Senior staff	Contract																						
Salary																									
Reason			Capacity Util. Level	100,00																					
PS type	01	Standard contract	Work hours/period	173,33 Monthly																					
PS Area	05 Atlanta		Next increase																						
PS group	EXEC	Level 01	Annual salary	250.000,00 USD																					
<table border="1"> <thead> <tr> <th>Wa</th> <th>Wage Type</th> <th>Long Text</th> <th>O</th> <th>Amount</th> <th>Curr.</th> <th>I</th> <th>A</th> <th>Number/Unit</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>1002</td> <td>Salary</td> <td></td> <td></td> <td>20.833,33</td> <td>USD</td> <td></td> <td><input checked="" type="checkbox"/></td> <td>0,00</td> <td></td> </tr> </tbody> </table>						Wa	Wage Type	Long Text	O	Amount	Curr.	I	A	Number/Unit	Unit	1002	Salary			20.833,33	USD		<input checked="" type="checkbox"/>	0,00	
Wa	Wage Type	Long Text	O	Amount	Curr.	I	A	Number/Unit	Unit																
1002	Salary			20.833,33	USD		<input checked="" type="checkbox"/>	0,00																	
Payments and Deductions																									
Reporting period: 15.07.2001 to 31.12.9999																									
PerNo	Name	Activity	PT	PA	PS	Group	PL																		
Infotyp	Subtyp		Ob		Start Date	End Date																			
Reas.																									
W. type	Amount	Curr.	D	Number	Unit	%difference																			
00109560 Mr. Charlie Finance				Vice President	01 05 EXEC	01																			
0008 Basic Pay	0			Basic contract		15.07.2001-31.12.9999																			
1002 Salary	20.833,33	USD			0,00	0,00																			
**** Total	20.833,33	USD			0,00	0,00																			
0015 Additional Payments M101 01.01.2002-01.01.2002																									
M101 Merit bonus - regul	20.000,00	USD			0,00	0,00																			

Figure 5.33 Employees Organizational Assignment and Basic Pay Information

Let's start by refreshing our memory and looking at an employee's organizational assignment and basic pay infotype (Figure 5.33). This shows both infotype 0008 and the payments and deductions information for this employee, which you should expect to see when you pay the employee.

After ensuring that all your employee's details are correct for this payroll period, you can run payroll in test mode. When you're satisfied that everything is correct, run the actual payroll, which checks the payroll log to ensure all records have processed correctly (Figure 5.34).

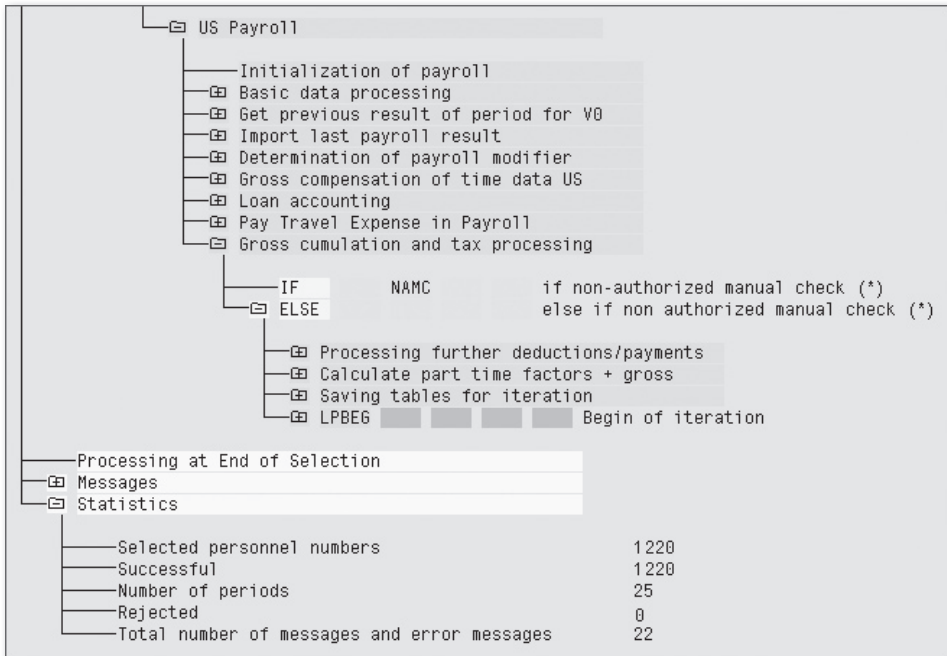


Figure 5.34 Payroll Log

For all payroll runs, you can use Transaction PCPO to check the current status. Payroll has two purposes: first, to make payments out to employees, and, second, to update the ledger. Looking at Figure 5.35, you can see that the screen is split into two sections presenting the posting of payments to employees and the posting of the ledger entries to SAP General Ledger.

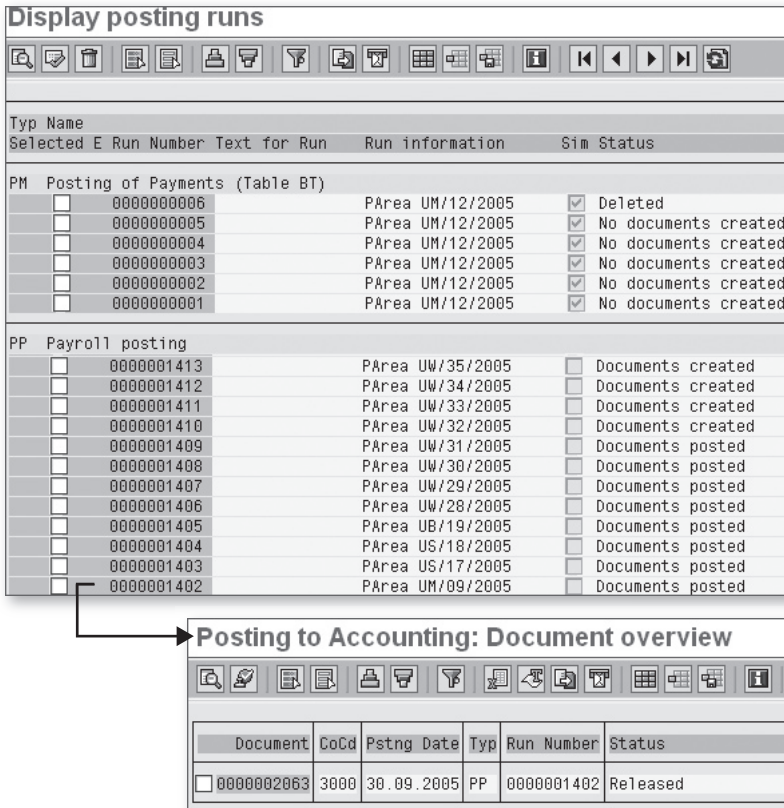


Figure 5.35 Display Posting Runs (Transaction PCPO)

Note
 You can pay your employees without updating the ledger because these two actions are usually performed separately.

You can look at your payroll posting run by double-clicking it (Figure 5.36). This view shows the payroll posting document (which is not the same view as the document that you will eventually see in SAP General Ledger). At this level, you see an entry made for each general ledger account and Controlling (CO) account assignment object being paid in this run; you can also see the posting to general ledger expense (salaries codes), taxes, and balance sheet clearing (control) accounts.

Display Payroll Posting Document

Run 0000001402
 Company Code 3000
 Document 0000002063
 PostingCurrency USD
 Reference XXXXX00001
 Doc. Type AB
 Run Type PP
 Bus. Transaction HRP1

Warnings Exist for this Document

Selected	M	S	Bus#	Tx	Line	PType	Account Number with Text	CO Acct A	Debit Amount	Credit Amount	Crcy
<input type="checkbox"/>			9900		6/L...		465000 Payroll taxes	Cctr 4130	1.825,95		USD
<input type="checkbox"/>			9900		6/L...		430000 Salaries - base wage	Cctr 4205	12.000,00		USD
<input type="checkbox"/>			9900		6/L...		465000 Payroll taxes	Cctr 4205	174,00		USD
<input type="checkbox"/>			0001		6/L...		176410 Benefits (Employer)	Cctr 9510	761,48		USD
<input type="checkbox"/>			0001		6/L...		430000 Salaries - base wage	Cctr 9510	3.725,25		USD
<input type="checkbox"/>			0001		6/L...		465000 Payroll taxes	Cctr 9510	284,55		USD
<input type="checkbox"/>			0001		6/L...		176410 Benefits (Employer)	Cctr 9515	3.750,95		USD
<input type="checkbox"/>			0001		6/L...		430000 Salaries - base wage	Cctr 9515	31.250,00		USD
<input type="checkbox"/>			0001		6/L...		465000 Payroll taxes	Cctr 9515	462,87		USD
<input type="checkbox"/>			0001		6/L...		176410 Benefits (Employer)	Cctr 9580	2.233,64		USD
<input type="checkbox"/>			0001		6/L...		430000 Salaries - base wage	Cctr 9580	20.000,00		USD
<input type="checkbox"/>			0001		6/L...		465000 Payroll taxes	Cctr 9580	290,35		USD
<input type="checkbox"/>			0001	\$	6/L...		176880 HR Clearing Account		4.771,37		USD
<input type="checkbox"/>			9900	\$	6/L...		176880 HR Clearing Account			4.771,37	USD
* Posting document 0000002063									512.283,64	512.283,64	USD
**									512.283,64	512.283,64	USD

Figure 5.36 Payroll Posting Document

Note

Earlier, in Figure 5.34, warning messages appeared at the bottom of the posting. Because these messages were only warnings, it was still possible to process the payroll. These messages are shown in Figure 5.37.

Messages for Document 0000002063

Do not assign any objects in cost accounting to account 176410 (Warning Message)
 Do not assign any objects in cost accounting to account 176880 (Warning Message)

Messages for Line Items

You Can Access More Information About Substitutions and Messages
 By Clicking the Corresponding Symbol

Figure 5.37 Messages Generated from Payroll Run

Because this is a posting per general ledger account and CO object combination, you can see the breakdown of this posting. Double-clicking the amount of \$31,250.00 in Figure 5.36, you can see the breakdown of what makes this amount, as shown in Figure 5.38. This shows that there were two items making up this amount.

Display revision information for posting document										
Display Summarized										
Sele	Account with Text	B/L	CO Acctnt	WT	Wage Type Long Text	Pers.No.	Debit Amount	Credit Amount	Exp.type	Crcy
<input type="checkbox"/>	430000 Salaries...	430000	Cctr 9515	1002	1002 Salary	109560	20.833,33			USD
<input type="checkbox"/>	430000 Salaries...	430000	Cctr 9515	1002	1002 Salary	109569	10.416,67			USD
*	430000 Salaries...		Cctr 9515		1002 Salary		31.250,00			USD
**							31.250,00			USD

Figure 5.38 Revision Information for Posting Document

Figure 5.38 is a summary report by employee. To see the details below the summary report, double-clicking on a line, which produces Figure 5.39. The first thing you should note here is that the line on the previous screen was per employee. The detail behind each line is quite lengthy; and here you can see a long list of wage types associated with this employee.

Display revision information for posting document										
Only Posted Wage Types										
25.08.2009 Employee's Payroll Results and Posted Amounts For a Period										
Display of All Wage Types, Unsummarized										
Pers.No.	Sequence Number	Status Ind	IN:Payroll Area	IN:Period	IN:PayTyp	IN:ID	IN:Date	FOR:Payroll Area		
109560	00051	A	UM	09 2005				UM		
Payroll Results (Table RT):										
Wage Type	Wage Type Long Text	Amount	Crcy	Posted: Debit	Posted: Credit					
/101	Total gross	20.833,33	USD	39,27	39,27					
/102	401(k) Wages	20.833,33	USD	39,27	39,27					
/104	NQP Eligible Earns	20.833,33	USD	39,27	39,27					
/109	ER benefit contributions	1.014,44	USD	39,27	39,27					
/110	Net payments/Deductions	68,60	USD	39,27	39,27					
/114	Base wage for BSI	20.833,33	USD	39,27	39,27					
/301	T6 Withholding Tax	41.666,66	USD	39,27	39,27					
/303	T6 EE Social Security Tax	20.833,33	USD	39,27	39,27					
/304	T6 ER Social Security Tax	20.833,33	USD	39,27	39,27					
/305	T6 EE Medicare Tax	20.833,33	USD	39,27	39,27					
/306	T6 ER Medicare Tax	20.833,33	USD	39,27	39,27					
/310	T6 ER Unemployment Tax	41.666,66	USD	39,27	39,27					
/401	TX Withholding Tax	6.079,29	USD		6.079,29					
/405	TX EE Medicare Tax	302,08	USD		302,08					
/406	TX ER Medicare Tax	302,08	USD	302,08	302,08					
/550	Statutory net	14.451,96	USD	302,08	302,08					
/559	Payment	14.383,36	USD		14.383,36					
/560	Amount to be paid	14.383,36	USD		14.383,36					
/5PY	Good Money	20.833,33	USD		14.383,36					
/5U0	Tot EE tax	6.381,37	USD		14.383,36					
/5U1	Tot ER tax	302,08	USD		14.383,36					

Figure 5.39 Detailed Information for Employee Payroll Posting

Not all of the wage types will post to the ledger for this employee; you should focus on only posted wage types. If you click the ONLY POSTED WAGE TYPES button (as shown in Figure 5.39), the screen shown in Figure 5.40 appears.

Payroll Results (Table RT):

Wage Type	Wage Type Long Text	Amount	Crcy	Posted: Debit	Posted: Credit
/401	TX Withholding Tax	6 079,29	USD		6 079,29
/405	TX EE Medicare Tax	302,08	USD		302,08
/406	TX ER Medicare Tax	302,08	USD	302,08	302,08
/559	Payment	14 383,36	USD		14 383,36
2110	Std Medical EE after-tax	36,83-	USD		36,83
2117	Dental EE after-tax	31,77-	USD		31,77
2310	Std Medical Employer	465,42	USD	465,42	465,42
2317	Dental Employer	7,50	USD	7,50	7,50
2410	Std Medical Provider	502,25	USD	502,25	502,25
2417	Dental Provider	39,27	USD	39,27	39,27

Figure 5.40 Posted Wage Types for This Employee Payroll Posting

Let's now revisit Figure 5.35, which shows Transaction PCPO, Display Posting Runs. Recall that it is from this screen that you can double-click a posting run to see the POST TO ACCOUNTING: DOCUMENT OVERVIEW screen. If you select this item, and then select GOTO • ACCOUNTING DOCUMENTS, you'll see the link to the accounting document from this payroll document, as shown in Figure 5.41.

Posting to Accounting: Document overview

Document	CoCd	Pstng Date	Typ	Run Number	Status
<input checked="" type="checkbox"/> 0000002063	3000	30.09.2005	PP	0000001402	Released

List of Documents in Accounting

Doc. Numb	Object type text	Ld
0100005737	Accounting document	
0000301475	Profit center doc.	
0200078954	Controlling Document	

Original document

Figure 5.41 Documents in Accounting

The accounting document posted reflects the document we saw previously. If you look at the financial document it produces, you should be able to match line items to the Payroll document shown earlier in Figure 5.36.

5.4.8 Payroll Posting Variant

The final configuration activity we need to look at is the payroll posting variant. Although it actually comes into play earlier in the process (when you are running the Payroll Driver), we've deliberately included it here so that you can better understand the configuration.

The posting variant controls the posting to accounting settings, which we need to manage the document that is being posted. In Figure 5.42, the document type, reference information, and the way documents are structured are all controlled by the posting variant. The posting variant configuration path and screen are shown in Figure 5.43.

Display Document: General Ledger View													
Display Currency Entry View Other Ledger													
Data Entry View													
Document Number	100005737			Company Code	3000			Fiscal Year	2005				
Document Date	07.11.2005			Posting Date	30.09.2005			Period	9				
Reference	XXXXX00001			Cross-CC no.									
Currency	USD			Texts exist	<input type="checkbox"/>			Ledger Group					
Ledger OL													
Doc.	100005737			FiscalYear	2005			Period	9				
C...	Itm	L.Item	PK	S	Account	Description	Amount	Curr.	Tx	Cost Center	Order	Profit Center	
3000	56	000056	40		465000	Payroll taxes	83,24	USD		2200		3402	
	57	000057	40		430000	Salaries - base wage	16.980,04	USD		2220		3402	
	58	000058	40		434000	Holiday and vacation	5.070,75	USD		2220		3402	
	59	000059	40		465000	Payroll taxes	319,74	USD		2220		3402	
	60	000060	40		430000	Salaries - base wage	7.000,00	USD		3120		3100	
	61	000061	40		465000	Payroll taxes	535,50	USD		3120		3100	
	62	000062	40		430000	Salaries - base wage	20.700,00	USD		3140		3500	
	63	000063	40		465000	Payroll taxes	1.583,55	USD		3140		3500	
	64	000064	40		176410	Benefits (Employer)	1.041,68	USD		3200		3402	
	65	000065	40		430000	Salaries - base wage	10.416,67	USD		3200		3402	
	66	000066	40		465000	Payroll taxes	588,45	USD		3200		3402	

Figure 5.42 Accounting Document from Payroll

There are several important settings made in this configuration activity, but we focus on the following fields for the purposes of this discussion:

► **DOCUMENT TYPE**

This defines the Finance document type that is posted to.

► **PREFIX FOR REFERENCE**

If you look back at Figure 5.42, you can see that the REFERENCE field has a prefix in it. This is defined in this field.

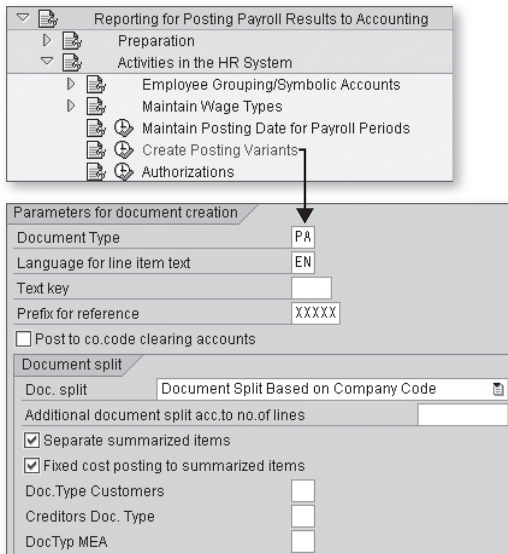


Figure 5.43 Payroll Posting Variant Configuration

► **DOC. SPLIT**

The document splitting settings here are not the SAP General Ledger document splitting settings. When you post payroll, there can be thousands of lines; here, you specify whether these documents are to be split up by company code or by account assignment object. This decision needs to be made based on practicality and business requirements. If you are posting to hundreds of account assignment objects, then this could generate hundreds of documents.

► **SEPARATE SUMMARIZED ITEMS**

As we mentioned earlier, the payroll generates separate documents for the expense and balance sheet items. The setting to request that is made here.

5.5 Summary

This chapter explained the integration of SAP ERP HCM with SAP ERP Financials. We did not cover every element of SAP ERP HCM but instead focused specifically on the configuration and design of the two key integration areas: Organizational Management and Payroll. This is a very interesting area because more and more organizations are implementing SAP Payroll and SAP ERP HCM. In the next chapter, we look at the complex subject of integrating Asset Accounting, Investment Management, and Project Systems.

Index

A

ABAP program, 350
Access sequence, 92
Account assignment, 178
Account assignment group
 material, 84, 99
Account assignment object, 275
Account category reference, 172, 173
Account determination, 107, 170, 178, 259
 customer account assignment group, 81
 payroll, 243
 payroll posting to vendors and customers, 246
 SD, VKOA, 109
Account determination procedure
 for billing documents, 106
Account fields, 159
Account group, 46, 162, 174
Accounting, 155, 260
Accounting document, 169
Account modifier, 176
Accounts, 179
Accounts Payable, 191
 invoice, 142
Accounts Receivable invoices
 purpose, 61
Account type, 197
Accrual orders, 56, 280
Accumulated depreciation, 325
Activation type, 286
Additional log, 208
AKO, 181
Allocation structure, 278, 291
Alphanumeric, 146
APC value, 261, 271
Application toolbar, 24
Approval, 334

Asset

class, 269
lifecycle, 257, 259
master record, 298
number range intervals, 267
portfolio, 267
retirement, 260
shell, 313, 316
transfers, 259
value date, 320
Asset Accounting (AA), 17, 257
Asset Explorer, 323
Asset under construction (AuC), 278
Assign, 144
Assign chart of depreciation, 261
Assignment control, 32
Assignment field
 AR document, 119
Attributes, 153
AUA, 183
AUF, 183
AUI, 183
AUM, 181
Automatic clearing, 125
Automatic credit control, 131
Automatic payment program, 198, 207
Automatic payment run, 192
Availability controls, 278

B

Background, 323
Balance sheet account, 293
Balance sheets, 28
Bank account, 199, 205
Bank determination, 204
Bank key, 206
Bank subaccount, 205

- Bank transfer, 201
 - Baseline date, 120
 - Batch input session, 350, 368
 - Batch session, 294
 - Billing, 101
 - date, 64*
 - Billing document, 101
 - customer master record, 80*
 - header, 101*
 - purpose, 61*
 - type, 105*
 - BO1, 181
 - BO2, 181
 - BO3, 181
 - BSA, 183
 - BSX, 179, 181
 - Budget, 284
 - profile, 278, 280*
 - Business area, 37
 - business area determination for sales area, 72*
 - SD business area account assignment, 71*
 - Business process, 140
- C**
-
- Calendar
 - sales calendar, 64*
 - Cancel billing type, 106
 - Capitalization, 259, 300
 - Centralized purchasing, 43, 143
 - Change Layout button, 371
 - Characteristics, 153, 266
 - Chart of accounts, 28, 33, 37
 - Chart of accounts segment, 46
 - Chart of depreciation, 28, 39, 261
 - Check, 196, 201
 - Checkbox, 24
 - Chk Double Invoice, 165
 - City, 29
 - City code, 148
 - Coding mask, 329
 - Command field, 24
 - Company code, 28, 144, 317
 - assigning sales organization to company code, 65*
 - Company code data, 158
 - customer master data, 77*
 - Company code segment, 46
 - Conclusion, 344
 - Condition record, 90
 - define condition tables, 91*
 - Configuring organizational objects, 63
 - Consignment, 181, 185
 - Consumption, 181
 - Contact person, 168
 - Controlling, 312
 - area, 327*
 - Controlling area, 28, 31
 - Conversion rules, 362
 - CO partner update, 281
 - Copy control, 95
 - for billing documents, 95*
 - for sales order header, 95*
 - sales document, 95*
 - Copy/delete, 263
 - Core configuration, 260, 327, 328
 - Correspondence, 158
 - Cost center, 35, 45, 52
 - SAP ERP HCM, 214*
 - Cost element, 45, 50
 - category, 51*
 - Costing, 155
 - Country, 29
 - Country-specific, 262
 - County code, 148
 - Create screen layout rules, 261, 266
 - Creating a project, 327, 336
 - Credit control area, 28, 36
 - assign sales area to credit control area, 71*
 - Currency, 29

Currency type, 33
 Customer master data
 address, 75
 configuration, 72
 control, 76
 field status of customer master record, 74
 general data, 74
 linking vendors to customers, 76
 payment transactions information, 76
 Customer number ranges
 configuration, 73
 Customer tolerance, 123
 Custom field, 335
 Custom message, 378

D

Data Browser, 347
 Data migration, 350
 Deactivation, 301, 325
 Debit/credit, 181
 Decentralized purchasing, 43, 143
 Default account assignment, 52
 Define
 asset class, 261, 269
 budget profile, 284
 check, 376
 depreciation area, 270
 investment profile, 282
 order type, 279
 prerequisite, 375
 tolerance limits, 286
 Deliv. Date, 170
 Delivery, 141
 address, 169
 goods delivery, 100
 Delivery notes, 61
 purpose, 61
 Delta
 depreciation area, 297
 Depreciation, 258, 260

account, 293
 area, 262
 area 01, 272
 determine depreciation area, 272
 key, 270
 posting, 260
 term, 272
 Description, 144
 Dialogue structure, 150
 DIF, 181
 Direct debits
 customer master record, 76
 Display, 161
 Displayed, 160
 Display proposal, 209
 Distribution channels, 42
 configuration and assignment, 66
 purpose, 65
 Division, 42
 assignment of material master, 67
 configuration and assignment, 67
 purpose, 66
 sales material, 84
 Document number range
 AR, 114
 SD, 114
 Document type, 192, 202, 294
 AR document type, 114
 RV, 114
 DST, 183
 Dummy profit center, 55
 Dunning, 133
 Dunning area, 134
 customer master record, 79
 Dunning block, 118, 134
 Dunning procedure, 134
 customer master record, 79

E

Edit proposal, 209
 Employee group, 220

Employee master record, 225
Employee subgroup, 220
EnjoySAP, 169
Enterprise structure, 27, 327
 SD, 62
Exception list, 209
Exchange rate, 184
Exit payroll
 payroll process, 217
External acquisition, 257, 316
External (Ext), 268

F

Factory calendar, 147
FAGLL03, 369
FBL1N, 369
FBL3N, 369
FBL5N, 369
FI-AA account determination, 292
Field
 key, 331
 selection, 334
 status group, 276
Field mapping, 362
Field status, 160
Field status group, 49
Final settlement, 342
Finance, 260
Financial statement, 158
First acquisition on, 301
Fiscal year variant, 33
Fixed values, 363
Foreground, 323
Foreign currency, 204
FR1, 182
FR2, 182
FR3, 182
FR4, 182
FS00, 46
FSCM, 126

G

Gantt chart, 326, 342
GBB, 175, 179, 182
General data, 158
General ledger account, 45, 177
General modifier, 183
Goods receipt, 139, 141, 142, 186, 187
 note, 189
Goods supplier, 168
GR-Based Inv. Verif., 167
Group account number, 46

H

Header text determination
 sales document, 94
Head office
 customer master record, 77
HM00
 pricing condition, 90
House bank, 166, 205, 206
HR organizational structure, 225

I

Identification, 208
iDocs, 350
IFRS, 296
IMG, 25
Incoming payments
 AR, 122
Incompletion procedure
 sales order, 97
Inflation, 186
Infotype
 0000, 227
 0001, 228
 0002, 229
 0006, 229
 0007, 231

0008, 231
 0009, 232
 0014, 233
 0016, 234
 0027, 234
 0207, 235
 0209, 235
 2010, 235
 Input tax, 186
 Integrated planning, 282
 Integrated testing, 23
 Integration, 139, 162, 258
 Interest Freq., 164
 Interest Indic., 164
 Internal accounting, 31
 Internal orders, 35, 45, 55
 SAP ERP HCM, 214
 INV, 183
 Inventory-related purchase, 142
 Investment
 order, 280, 302
 profile, 278, 337, 341
 Investment Management, 17, 257
 Investment order, 56
 Investments tab, 305
 Invoice verification, 139, 141, 189
 Item categories, 97

J

Job, 213

K

KDM, 184
 KDR, 185
 Key stage, 140
 KOFI
 account determination, 107
 KON, 175, 185
 KTR, 184

L

Leading ledger, 296
 Length, 151
 Liability, 189
 Line item display, 48
 LIV, 185
 Local currency, 296
 Location, 301
 Logistics, 147
 LSMW, 350, 363

M

Main asset number, 267
 Maintain allocation structure, 288
 Maintaining budgets, 307
 Maintain object, 353
 Maintain settlement profile, 289
 Manual (outgoing) payment, 196
 Manufacturing, 147
 Marked item, 204
 Master data, 139, 151, 298
 S2C, 72
 Master data object, 45
 Material, 141
 type, 153, 173
 Material document, 188
 Material master
 assignment of division, 67
 material pricing group, 68
 Material master data
 SD account determination, 82
 Material pricing groups
 assignment on material master, 68
 Menu bar, 24
 Message class, 377
 Milestone, 326, 344
 Movement type, 171, 174, 175, 177
 Moving price, 156

N

Net book value, 271, 325
 Network, 328
 New General Ledger, 54
 Non-inventory-related purchase, 142
 Nonleading ledger, 296
 Numbering conventions, 329
 Number range, 262
 externally, 152
 Finance and SD, 114
 internally, 152

O

Object
 class, 281
 currency, 286
 One-time account, 160
 One-to-one, 145
 Open item, 142, 197
 Open item management, 48
 Opt. Entry, 161
 Optional, 266
 Order currency, 166
 Ordering address, 168
 Orders with revenue, 56, 280
 Order type, 278
 Organizational element, 143
 Organizational Management (OM), 212
 Organizational object, 27
 Organizational structure
 SAP ERP HCM, 215, 225
 SAP ERP HCM configuration and design, 225
 Organizational structure objects
 SD, 62
 Organizational unit, 28, 213
 Original asset, 301
 Outgoing payment, 142, 192
 Output format, 151
 Overhead cost order, 56, 280

P

P2P, 139
 Parallel ledger, 295
 Parameter, 208
 Parameter tab, 208
 Partial
 retirement, 325
 transfer, 321
 Partner functions, 166
 customer master record, 81
 Paying company code, 199, 200
 Payment
 block, 166, 195
 block reason, 195
 difference, 193, 194
 medium program, 203
 method, 166, 201
 run, 208
 Payment terms, 371
 AR invoices, 120
 Payment transaction
 customer master data, 76
 Payroll, 17
 Payroll area, 216, 220
 Payroll calendar, 222
 Payroll control record, 221
 Payroll Driver
 configuration, 237
 country-specific, 238
 Payroll engine, 215
 Payroll posting
 display posting runs, 252
 example of process, 249
 Payroll posting to accounting variant, 253
 Payroll run
 payroll cycle, 217
 Payroll schema, 239
 Periodic
 basis, 274
 posting, 276
 processing, 274
 settlement, 341

Personnel
 area, 28, 218
 subarea, 44
 subareas, 218
 Person responsible, 334
 Planning profile, 280
 Plant, 143, 146, 301
 code, 69
 definition, 69, 147
 ID, 146
 purpose, 68
 PN00
 pricing condition, 90
 PO
 invoice, 191
 number known, 187
 quantity, 170
 Position, 213
 Post
 depreciation, 322
 retirement, 324
 transfer, 320
 Post automatically only, 50
 Posting key, 178, 276
 Posting run, 323
 Posting to accounting variant
 HR, 253
 PRO0
 pricing condition records, 92
 PRA, 184
 PRD, 175, 184
 Prerequisite, 147, 381
 Prerequisite stage
 payroll cycle, 216
 Prev. Acct. No., 165
 PRF, 184
 Price
 control, 156
 difference, 184
 unit, 157
 variance, 184
 Pricing, 63, 89
 Pricing condition records, 89

Pricing control, 89
 Pricing procedure, 91
 PREF00, 93
 Primary cost element, 50
 PRK, 184
 Process design document, 22
 Product hierarchy, 151
 Profit and loss (P&L) reports, 28
 Profit center, 45, 53, 141, 303
 Profit center determination, 55
 Project
 management, 340
 milestone, 327, 335
 posting lifecycle, 327, 341
 profile, 330, 336
 status, 329
 structure, 337
 type, 331
 Project Systems (PS), 257, 326
 Prototyping, 23
 Provisions, 181
 PRU, 184
 Purchase, 145
 orders, 139, 308
 requisition, 141, 169
 Purchase order to payment, 17
 Purchase organization, 28
 Purchasing data, 166
 Purchasing group, 143, 146
 Purchasing organization, 43, 143
 data, 158

R

Radio buttons, 24
 Ranges, 152
 Ranking order, 204
 RAPOST2000, 277, 294
 Real and statistical postings, 34
 Real time, 163, 274
 Reason code, 192, 193
 Rebate, 181

Recon. Account, 163
 Recon. Account for Acct Type, 47
 Reconciliation account, 158, 265
 customer master record, 77, 80
 Recording, 357
 Reference, 189, 317
 Region, 148
 REL AUC, 306
 Remittance advice, 200
 Req. Entry, 161
 Required, 160, 266
 Residual item, 292
 Responsible CCtr, 303
 Retirement, 258
 Revaluation, 185
 Revenue posting, 282
 RFFOUS_C, 203
 RFFOUS_T, 203
 RFZALI20, 210
 Risk category
 credit management, 129
 RKA, 185
 RMK, 176
 Rounding, 185
 RUE, 185
 Rules, 179
 Run date, 208
 RV
 Document type, 114

S

SAKNR, 357
 Sales and Distribution, 41
 Sales area, 63, 70
 assign sales area to credit control area, 71
 define permissible sales area, 70
 purpose, 63
 Sales area data
 customer master record, 79

Sales order, 85
 document type configuration, 88
 purpose, 60
 Sales order to cash, 17
 Sales order type, 87
 Sales organization, 28, 41, 42
 assign sales organization to company code, 65
 purpose, 63
 SAP Credit Management, 126
 SAP ERP Financials, 330
 SAP ERP HCM
 organizational unit, 213
 restrospective changes, 216
 retroactive changes, 216
 WBS, 214
 work center, 214
 SAPF124
 GL clearing rules, 125
 SAP FSCM
 credit management, 126
 SAP General Ledger, 265
 SAPscript, 204
 Scrapping, 258, 324
 Screen layout, 159, 267, 270
 Search term
 customer master, 75
 Secondary cost elements, 51
 Segment, 45, 57
 Selection criteria, 142
 Sender, 152
 Sending company code, 199
 Serial number, 300
 Settlement, 287, 310
 period, 310
 process, 314
 profile, 278, 280, 314
 rule, 314
 type, 314
 Settlements, 181
 Shipping, 147

Sort key, 164
 assignment field, 119
 customer master record, 77
 Source
 field, 359
 structure, 358
 Source structure, 291
 Specify
 account determination, 261, 265
 number assignment, 264
 transfer of APC values, 271
 Standard layout, 334
 Standard price, 151, 156, 184
 Standard toolbar, 24
 Statistical order, 304
 Statistical posting, 34
 Status bar, 24
 Status management, 332
 Status profile, 282, 329
 Storage location, 143, 149
 Structure relations, 361
 Subledger, 163
 Substitution, 55, 332, 379, 382
 Summary, 344
 Summary settlement, 284
 Supplier, 141
 Suppress, 160
 Suppressed, 266
 Symbolic account
 linking to wage type, 243
 Symbolic accounts, 241

T

Tab, 24
 Target, 152
 Task list, 353
 Tax, 190
 Tax line
 AR invoice, 119
 Template, 151
 Terms of payment
 customer master, 78
 Test run, 312
 Text, 190
 Text control
 text determination, 93
 Text determination, 93
 sales document header text, 94
 Three-way matching, 141
 Title bar, 24
 Tolerance group
 customer master record, 78
 Tolerance limits, 278
 Transaction
 ABAVN, 324
 ABUMN, 320
 ACSET, 277
 AFAB, 322
 AO11, 264
 AO71, 294
 AO90, 292
 AS01, 298
 AS08, 268
 CJ20N, 329, 336
 CJ88, 341
 CRTD, 303
 F-53, 196
 F-90, 317
 F110, 207, 217
 FB00, 372
 FB60, 191, 308
 FBZP, 198
 FD32, 128
 FI12, 206
 FK01, 158
 FK03, 163
 FS00, 351
 FTXP, 190
 IPRO, 303
 KA03, 51
 KE53, 54
 KO01, 303

KO02, 305, 314, 316
 KO22, 307
 KO88, 310, 314
 KOT2, 280
 KS03, 52
 MBO3, 188
 ME21N, 169
 MIGO, 187
 MIRO, 189
 MK01, 159
 MMNR, 152
 OABC, 271
 OABD, 272
 OAOA, 269
 OAOB, 264
 OAYZ, 273
 OB13, 38
 OB27, 166
 OB28, 374
 OB62, 38
 OBBH, 380
 OBYC, 178
 OITA, 282
 OKOB, 284
 OMJJ, 175
 OMSK, 156, 171
 OMSL, 151
 OX02, 29
 OX09, 149
 OX10, 147
 OX14, 149
 OX18, 149
 PCP0, 252
 SE16, 345
 SE16N, 347
 SM35, 368
 SM37, 323
 VF03, 110
 VKOA, 109
 VOFM, 97
 Transaction Data tab, 324
 Transaction/event, 175
 Transaction group, 176

Transaction key, 171, 176
 Transaction type 100, 278
 Transfer, 181, 258
 Translations, 363
 Transporting, 152
 Trans.Type, 318, 319

U

UMB, 185
 Unplanned, 185
 Update
 credit management, 129
 UPF, 185
 Useful life, 270
 User-defined routine, 363
 U.S. GAAP, 296

V

Validation, 332, 373
 Validations and substitutions in Asset
 Accounting, 384
 Valuation, 149, 273, 302
 class, 156, 172
 modifier, 183
 Value date, 205
 Variance, 142
 VAX, 183
 VAY, 183
 VBR, 183
 Vendor, 259
 account group, 159
 master data, 158
 number range, 161
 tolerance, 192
 View, 155
 VKA, 183
 VKP, 183
 VNG, 183
 VST, 186

W

Wage type, 240
 linking to symbolic account, 243
 posting characteristics, 242
 types of, 241
WBS, 326, 329
 element, 332
 status profile, 330
WGI, 186
WGR, 186
Wizard, 297
Workbench, 367
Workbench request, 379
Workflow, 334
WRX, 185, 186

X

XK01, 158
XK03, 166
XKN1, 162

Z

ZOB, 183
ZOF, 183
Z-table, 373